

# SEQUENCE LISTING

<110> Gantier, Rene  
Guyon, Thierry  
Drittanti, Lila  
Vega, Manuel

<120> Rational Evolution of Cytokines for Higher Stability, the Cytokines  
Encoding Nucleic Acid Molecules

<130> 38751-922

<140> 10/658,834

<141> 2003-09-08

<150> 60/457,135

<151> 2003-03-21

<150> 60/409,898

<151> 2002-09-09

<160> 1306

<170> FastSEQ for Windows Version 4.0

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<212> PRT

<213> Homo sapiens

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		20						25					30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
		35					40					45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
	50					55					60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70					75				80	
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
			85						90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
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Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
	115						120				125				
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
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Leu	Arg	Ser	Lys	Glu											
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<210> 2

<211> 165

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<220>

<223> D2A Mutant IFN-alpha 2b

<400> 2

Cys Ala Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 3  
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<220>  
 <223> P4A Mutant IFN-alpha 2b

<400> 3  
 Cys Asp Leu Ala Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 4  
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 <212> PRT  
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<220>  
 <223> Q5A Mutant IFN-alpha 2b

<400> 4  
 Cys Asp Leu Pro Ala Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met

1	5	10	15												
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
	20							25					30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
	35						40					45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
	50					55					60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70					75				80	
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
			85						90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
		100						105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
	115						120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
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Leu	Arg	Ser	Lys	Glu											
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 <223> T6A Mutant IFN-alpha 2b

<400> 5
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1 5 10 15
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp
20 25 30
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
35 40 45
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
50 55 60
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
65 70 75 80
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu
85 90 95
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys
100 105 110
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu
115 120 125
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg
130 135 140
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser
145 150 155 160
Leu Arg Ser Lys Glu
165

<210> 6  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> H7A Mutant IFN-alpha 2b

<400> 6
Cys Asp Leu Pro Gln Thr Ala Ser Leu Gly Ser Arg Arg Thr Leu Met
1 5 10 15

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Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp
 20                25                30
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
 35                40                45
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
 50                55                60
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
 65                70                75                80
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu
 85                90                95
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys
100                105                110
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu
115                120                125
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg
130                135                140
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser
145                150                155                160
Leu Arg Ser Lys Glu
165

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<210> 7  
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<220>  
 <223> S8A Mutant IFN-alpha 2b

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<400> 7
Cys Asp Leu Pro Gln Thr His Ala Leu Gly Ser Arg Arg Thr Leu Met
 1                5                10                15
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp
 20                25                30
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
 35                40                45
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
 50                55                60
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
 65                70                75                80
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu
 85                90                95
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys
100                105                110
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu
115                120                125
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg
130                135                140
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser
145                150                155                160
Leu Arg Ser Lys Glu
165

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<210> 8  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> L9A Mutant IFN-alpha 2b

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<400> 8
Cys Asp Leu Pro Gln Thr His Ser Ala Gly Ser Arg Arg Thr Leu Met
 1                5                10                15

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Leu Leu Ala Gln Met Arg Ile Ser Leu Phe Ser Cys Leu Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 9  
 <211> 165  
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 <213> Artificial Sequence

<220>  
 <223> G10A Mutant IFN-alpha 2b

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 Cys Asp Leu Pro Gln Thr His Ser Leu Ala Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 10  
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<220>  
 <223> S11A Mutant IFN-alpha 2b

<400> 10  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ala Arg Arg Thr Leu Met

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Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp				
		20						25					30						
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln				
		35					40					45							
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe				
		50				55					60								
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu				
		65			70					75					80				
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu				
			85						90					95					
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys				
		100						105					110						
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu				
		115					120					125							
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg				
		130				135					140								
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser				
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Leu	Arg	Ser	Lys	Glu															
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<220>  
 <223> R12A Mutant IFN-alpha 2b

<400> 11																			
Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Ala	Arg	Thr	Leu	Met				
1				5					10					15					
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp				
		20						25					30						
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln				
		35					40					45							
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe				
		50				55					60								
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu				
		65			70					75					80				
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu				
			85						90					95					
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys				
		100						105					110						
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu				
		115					120					125							
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg				
		130				135					140								
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser				
		145			150					155					160				
Leu	Arg	Ser	Lys	Glu															
				165															

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 <223> R13A Mutant IFN-alpha 2b

<400> 12

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Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
			20					25					30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
	35						40					45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
	50					55					60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70					75					80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
				85					90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
			100					105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
	115						120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 13  
 <211> 165  
 <212> PRT  
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<220>  
 <223> T14A Mutant IFN-alpha 2b

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Ala	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
			20					25					30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
	35						40					45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
	50					55					60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70					75					80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
				85					90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
			100					105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
	115						120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
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<210> 14  
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<220>  
 <223> L15A Mutant IFN-alpha 2b

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 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Ala Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 15  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> M16A Mutant IFN-alpha 2b

<400> 15  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Ala  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 16  
 <211> 165  
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<220>  
 <223> L17A Mutant IFN-alpha 2b

<400> 16

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Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met
 1           5           10           15
Ala Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp
          20           25           30
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
          35           40           45
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
          50           55           60
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
65           70           75           80
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu
          85           90           95
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys
          100          105          110
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu
          115          120          125
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg
          130          135          140
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser
145          150          155          160
Leu Arg Ser Lys Glu
          165
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<210> 17

<211> 165

<212> PRT

<213> Artificial Sequence

<220>

<223> Q20A Mutant IFN-alpha 2b

<400> 17

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Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met
 1           5           10           15
Leu Leu Ala Ala Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp
          20           25           30
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
          35           40           45
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
          50           55           60
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
65           70           75           80
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu
          85           90           95
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys
          100          105          110
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu
          115          120          125
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg
          130          135          140
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser
145          150          155          160
Leu Arg Ser Lys Glu
          165
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<210> 18

<211> 165

<212> PRT

<213> Artificial Sequence

<220>

<223> R23A Mutant IFN- $\alpha$  2b

<400> 18

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Ala	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
		20						25					30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
	35						40					45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
	50					55					60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70					75					80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
			85						90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
		100						105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
	115						120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 19

<211> 165

<212> PRT

<213> Artificial Sequence

<220>

<223> I24A Mutant IFN- $\alpha$  2b

<400> 19

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ala	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
		20						25					30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
	35						40					45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
	50					55					60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70					75					80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
			85						90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
		100						105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
	115						120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 20

<211> 165

<212> PRT

<213> Artificial Sequence

<220>

<223> S25A Mutant IFN-alpha 2b

<400> 20

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ala	Leu	Phe	Ser	Cys	Leu	Lys	Asp
		20						25					30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
	35					40					45				
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
	50				55					60					
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70					75					80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
			85						90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
		100						105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
	115						120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 21

<211> 165

<212> PRT

<213> Artificial Sequence

<220>

<223> L26A Mutant IFN-alpha 2b

<400> 21

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Ala	Phe	Ser	Cys	Leu	Lys	Asp
		20						25					30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
	35					40					45				
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
	50				55					60					
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70					75					80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
			85						90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
		100						105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
	115						120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 22

<211> 165

<212> PRT

<213> Artificial Sequence

<220>

<223> S28A Mutant IFN-alpha 2b

<400> 22

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ala	Cys	Leu	Lys	Asp
		20						25					30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
	35					40						45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
	50					55					60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70					75					80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
			85						90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
		100						105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
	115						120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 23

<211> 165

<212> PRT

<213> Artificial Sequence

<220>

<223> C29A Mutant IFN-alpha 2b

<400> 23

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Ala	Leu	Lys	Asp
		20						25					30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
	35					40						45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
	50					55					60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70					75					80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
			85						90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
		100						105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
	115						120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 24

<211> 165

<212> PRT



<213> Artificial Sequence

<220>

<223> L30A Mutant IFN-alpha 2b

<400> 24

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Ala	Lys	Asp
			20					25					30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
		35					40					45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
	50					55					60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70					75					80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
				85					90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
		100						105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
	115						120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 25

<211> 165

<212> PRT

<213> Artificial Sequence

<220>

<223> K31A Mutant IFN-alpha 2b

<400> 25

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Ala	Asp
			20					25					30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
		35					40					45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
	50					55					60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70					75					80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
				85					90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
		100						105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
	115						120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 26

<211> 165

<212> PRT  
<213> Artificial Sequence

<220>  
<223> D32A Mutant IFN-alpha 2b

<400> 26  
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
1 5 10 15  
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Ala  
20 25 30  
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
35 40 45  
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
50 55 60  
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
65 70 75 80  
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
85 90 95  
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
100 105 110  
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
115 120 125  
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
130 135 140  
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
145 150 155 160  
Leu Arg Ser Lys Glu  
165

<210> 27  
<211> 165  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> R33A Mutant IFN-alpha 2b

<400> 27  
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
1 5 10 15  
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
20 25 30  
Ala His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
35 40 45  
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
50 55 60  
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
65 70 75 80  
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
85 90 95  
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
100 105 110  
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
115 120 125  
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
130 135 140  
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
145 150 155 160  
Leu Arg Ser Lys Glu  
165

<210> 28

<211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> D35A Mutant IFN-alpha 2b

<400> 28  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Ala Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 29  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> G37A Mutant IFN-alpha 2b

<400> 29  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Ala Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 30  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> P39A Mutant IFN-alpha 2b

<400> 30  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Ala Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 31  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> E41A Mutant IFN-alpha 2b

<400> 31  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Ala Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 32  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> E42A Mutant IFN-alpha 2b

<400> 32  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Ala Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 33  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> F43A Mutant IFN-alpha 2b

<400> 33  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Ala Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu

<210> 34  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> N45A Mutant IFN-alpha 2b

<400> 34  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Ala Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 35  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> F47A Mutant IFN-alpha 2b

<400> 35  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Ala Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160

Leu Arg Ser Lys Glu  
165

<210> 36  
<211> 165  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> E51A Mutant IFN-alpha 2b

<400> 36  
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
1 5 10 15  
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
20 25 30  
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
35 40 45  
Lys Ala Ala Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
50 55 60  
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
65 70 75 80  
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
85 90 95  
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
100 105 110  
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
115 120 125  
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
130 135 140  
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
145 150 155 160  
Leu Arg Ser Lys Glu  
165

<210> 37  
<211> 165  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> T52A Mutant IFN-alpha 2b

<400> 37  
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
1 5 10 15  
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
20 25 30  
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
35 40 45  
Lys Ala Glu Ala Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
50 55 60  
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
65 70 75 80  
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
85 90 95  
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
100 105 110  
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
115 120 125  
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
130 135 140  
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser

145  
Leu Arg Ser Lys Glu  
165

150

155

160

<210> 38  
<211> 165  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> I53A Mutant IFN-alpha 2b

<400> 38  
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
1 5 10 15  
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
20 25 30  
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
35 40 45  
Lys Ala Glu Thr Ala Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
50 55 60  
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
65 70 75 80  
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
85 90 95  
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
100 105 110  
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
115 120 125  
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
130 135 140  
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
145 150 155 160  
Leu Arg Ser Lys Glu  
165

<210> 39  
<211> 165  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> P54A Mutant IFN-alpha 2b

<400> 39  
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
1 5 10 15  
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
20 25 30  
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
35 40 45  
Lys Ala Glu Thr Ile Ala Val Leu His Glu Met Ile Gln Gln Ile Phe  
50 55 60  
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
65 70 75 80  
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
85 90 95  
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
100 105 110  
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
115 120 125  
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
130 135 140



Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 40  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> V55A Mutant IFN-alpha 2b

<400> 40  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Ala Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 41  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> L56A Mutant IFN-alpha 2b

<400> 41  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Ala His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg

130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 42  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> H57A Mutant IFN-alpha 2b

<400> 42  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu Ala Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 43  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> E58A Mutant IFN-alpha 2b

<400> 43  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Ala Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125

Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 44  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> M59A Mutant IFN-alpha 2b

<400> 44  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Ala Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 45  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> I60A Mutant IFN-alpha 2b

<400> 45  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ala Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu

115                      120                      125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130                      135                      140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145                      150                      155                      160  
 Leu Arg Ser Lys Glu  
 165

<210> 46  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> I63A Mutant IFN-alpha 2b

<400> 46  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1                      5                      10                      15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20                      25                      30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35                      40                      45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ala Phe  
 50                      55                      60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65                      70                      75                      80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85                      90                      95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100                      105                      110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115                      120                      125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130                      135                      140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145                      150                      155                      160  
 Leu Arg Ser Lys Glu  
 165

<210> 47  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> F64A Mutant IFN-alpha 2b

<400> 47  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1                      5                      10                      15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20                      25                      30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35                      40                      45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Ala  
 50                      55                      60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65                      70                      75                      80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85                      90                      95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100                      105                      110

Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 48  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> N65A Mutant IFN-alpha 2b

<400> 48  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Ala Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 49  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> L66A Mutant IFN-alpha 2b

<400> 49  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Ala Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys



Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
100 105 110  
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
115 120 125  
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
130 135 140  
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
145 150 155 160  
Leu Arg Ser Lys Glu  
165

<210> 52  
<211> 165  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> K70A Mutant IFN-alpha 2b

<400> 52  
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
1 5 10 15  
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
20 25 30  
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
35 40 45  
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
50 55 60  
Asn Leu Phe Ser Thr Ala Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
65 70 75 80  
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
85 90 95  
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
100 105 110  
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
115 120 125  
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
130 135 140  
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
145 150 155 160  
Leu Arg Ser Lys Glu  
165

<210> 53  
<211> 165  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> D71A Mutant IFN-alpha 2b

<400> 53  
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
1 5 10 15  
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
20 25 30  
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
35 40 45  
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
50 55 60  
Asn Leu Phe Ser Thr Lys Ala Ser Ser Ala Ala Trp Asp Glu Thr Leu  
65 70 75 80  
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu





Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Lys Glu  
                   85                  90                  95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
                   100                  105                  110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
                   115                  120                  125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
                   130                  135                  140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
                   145                  150                  155                  160  
 Leu Arg Ser Lys Glu  
                   165

<210> 56  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> D77A Mutant IFN-alpha 2b

<400> 56  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
   1                  5                  10                  15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
                   20                  25                  30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
                   35                  40                  45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
                   50                  55                  60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Ala Glu Thr Leu  
                   65                  70                  75                  80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
                   85                  90                  95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
                   100                  105                  110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
                   115                  120                  125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
                   130                  135                  140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
                   145                  150                  155                  160  
 Leu Arg Ser Lys Glu  
                   165

<210> 57  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> E78A Mutant IFN-alpha 2b

<400> 57  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
   1                  5                  10                  15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
                   20                  25                  30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
                   35                  40                  45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
                   50                  55                  60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Ala Thr Leu



Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Leu  
 65 70 75 80  
 Leu Ala Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 60  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> K83A Mutant IFN-alpha 2b

<400> 60  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Ala Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 61  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> F84A Mutant IFN-alpha 2b

<400> 61  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe

50	Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65	Leu	Asp	Lys	Ala	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
				85						90					95	
	Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
				100					105						110	
	Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
			115						120					125		
	Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
		130					135						140			
	Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
	145					150					155				160	
	Leu	Arg	Ser	Lys	Glu											
					165											

<210> 62  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Y85A Mutant IFN-alpha 2b

<400> 62	Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1					5					10					15	
	Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
				20					25					30		
	Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
			35					40					45			
	Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
		50					55					60				
	Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
	65					70					75				80	
	Leu	Asp	Lys	Phe	Ala	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
				85						90					95	
	Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
			100						105					110		
	Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
			115					120					125			
	Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
		130					135						140			
	Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
	145					150					155				160	
	Leu	Arg	Ser	Lys	Glu											
					165											

<210> 63  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Y89A Mutant IFN-alpha 2b

<400> 63	Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1					5					10					15	
	Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
				20					25					30		
	Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
			35					40					45			

Lys Ala Glu Thr Ile Phe Val Leu His Glu Met Ile Gln Gln Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Ala Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 64  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Q90A Mutant IFN-alpha 2b

<400> 64  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Ala Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 65  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Q91A Mutant IFN-alpha 2b

<400> 65  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Phe Gly Asn Gln Phe Gln



Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Ala Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 68  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> C98A Mutant IFN-alpha 2b

<400> 68  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Ala Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 69  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> V99A Mutant IFN-alpha 2b

<400> 69  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp

		20					25				30				
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
		35					40				45				
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
		50					55				60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
		65				70				75					80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
				85					90					95	
Ala	Cys	Ala	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
				100				105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
		115					120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
		130				135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
		145				150				155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 70  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> G104A Mutant IFN-alpha 2b

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
					5				10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
			20					25				30			
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
		35					40					45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
		50				55					60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
		65				70				75					80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
				85					90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Ala	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
				100				105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
		115					120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
		130				135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
		145				150				155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 71  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> L110A Mutant IFN-alpha 2b

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
									10					15	



Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Ala Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 72  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> S115A Mutant IFN-alpha 2b

<400> 72  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ala Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 73  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Y122A Mutant IFN-alpha 2b

<400> 73  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met

1	5	10																	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp				
		20						25					30						
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln				
		35					40					45							
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe				
		50				55					60								
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu				
65					70					75					80				
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu				
				85					90					95					
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys				
		100						105					110						
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Ala	Phe	Gln	Arg	Ile	Thr	Leu				
		115					120					125							
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg				
		130				135					140								
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser				
145					150					155					160				
Leu	Arg	Ser	Lys	Glu															
				165															

<210> 74  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> W140A Mutant IFN-alpha 2b

<400> 74																			
Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met				
1				5					10				15						
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp				
		20						25				30							
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln				
		35					40					45							
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe				
		50				55					60								
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu				
65					70					75					80				
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu				
				85					90					95					
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys				
		100						105					110						
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu				
		115					120					125							
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Ala	Glu	Val	Val	Arg				
		130				135					140								
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser				
145					150					155					160				
Leu	Arg	Ser	Lys	Glu															
				165															

<210> 75  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> E146A Mutant IFN-alpha 2b

<400> 75

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
			20					25					30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
		35					40					45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
	50					55					60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70					75					80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
				85					90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
			100					105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
		115					120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135					140				
Ala	Ala	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 76  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> L3V Mutant IFN-alpha 2b

Cys	Asp	Val	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
			20					25					30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
		35					40					45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
	50					55					60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70					75					80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
				85					90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
			100					105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
		115					120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 77  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> R12H Mutant IFN-alpha 2b

<400> 77

Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser His Arg Thr Leu Met  
1 5 10 15  
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
20 25 30  
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
35 40 45  
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
50 55 60  
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
65 70 75 80  
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
85 90 95  
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
100 105 110  
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
115 120 125  
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
130 135 140  
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
145 150 155 160  
Leu Arg Ser Lys Glu  
165

<210> 78

<211> 165

<212> PRT

<213> Artificial Sequence

<220>

<223> R13H Mutant IFN-alpha 2b

<400> 78

Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg His Thr Leu Met  
1 5 10 15  
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
20 25 30  
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
35 40 45  
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
50 55 60  
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
65 70 75 80  
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
85 90 95  
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
100 105 110  
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
115 120 125  
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
130 135 140  
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
145 150 155 160  
Leu Arg Ser Lys Glu  
165

<210> 79

<211> 165

<212> PRT

<213> Artificial Sequence

<220>

<223> M16V Mutant IFN-alpha 2b

<400> 79

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Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Val
1          5          10          15
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp
20          25          30
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
35          40          45
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
50          55          60
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
65          70          75          80
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu
85          90          95
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys
100          105          110
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu
115          120          125
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg
130          135          140
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser
145          150          155          160
Leu Arg Ser Lys Glu
165
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<210> 80

<211> 165

<212> PRT

<213> Artificial Sequence

<220>

<223> M16I Mutant IFN-alpha 2b

<400> 80

```
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Ile
1          5          10          15
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp
20          25          30
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
35          40          45
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
50          55          60
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
65          70          75          80
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu
85          90          95
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys
100          105          110
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu
115          120          125
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg
130          135          140
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser
145          150          155          160
Leu Arg Ser Lys Glu
165
```

<210> 81

<211> 165

<212> PRT

<213> Artificial Sequence

<220>

<223> R22H Mutant IFN-alpha 2b

<400> 81

```
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met
 1          5          10          15
Leu Leu Ala Gln Met His Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp
          20          25          30
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
          35          40          45
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
          50          55          60
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
65          70          75          80
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu
          85          90          95
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys
          100          105          110
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu
          115          120          125
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg
          130          135          140
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser
145          150          155          160
Leu Arg Ser Lys Glu
          165
```

<210> 82

<211> 165

<212> PRT

<213> Artificial Sequence

<220>

<223> F27I Mutant IFN-alpha 2b

<400> 82

```
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met
 1          5          10          15
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Ile Ser Cys Leu Lys Asp
          20          25          30
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
          35          40          45
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
          50          55          60
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
65          70          75          80
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu
          85          90          95
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys
          100          105          110
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu
          115          120          125
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg
          130          135          140
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser
145          150          155          160
Leu Arg Ser Lys Glu
          165
```

<210> 83

<211> 165

<212> PRT

<213> Artificial Sequence

<220>

<223> F27V Mutant IFN-alpha 2b

<400> 83

```
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met
 1           5           10           15
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Val Ser Cys Leu Lys Asp
 20           25           30
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
 35           40           45
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
 50           55           60
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
 65           70           75           80
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu
 85           90           95
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys
100           105           110
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu
115           120           125
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg
130           135           140
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser
145           150           155           160
Leu Arg Ser Lys Glu
165
```

<210> 84

<211> 165

<212> PRT

<213> Artificial Sequence

<220>

<223> L30I Mutant IFN-alpha 2b

<400> 84

```
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met
 1           5           10           15
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Ile Lys Asp
 20           25           30
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
 35           40           45
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
 50           55           60
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
 65           70           75           80
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu
 85           90           95
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys
100           105           110
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu
115           120           125
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg
130           135           140
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser
145           150           155           160
Leu Arg Ser Lys Glu
165
```

<210> 85

<211> 165

<212> PRT

<213> Artificial Sequence

<220>

<223> K31Q Mutant IFN-alpha 2b

<400> 85

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Gln	Asp
			20					25					30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
		35					40					45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
		50				55					60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70					75					80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
				85					90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
			100					105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
		115					120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
		130				135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 86

<211> 165

<212> PRT

<213> Artificial Sequence

<220>

<223> R33H Mutant IFN-alpha 2b

<400> 86

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
			20					25					30		
His	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
		35					40					45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
		50				55					60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70					75					80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
				85					90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
			100					105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
		115					120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
		130				135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 87

<211> 165

<212> PRT



<213> Artificial Sequence

<220>

<223> E41Q Mutant IFN-alpha 2b

<400> 87

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
			20					25					30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Gln	Glu	Phe	Gly	Asn	Gln	Phe	Gln
		35					40					45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
	50					55					60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70					75					80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
				85					90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
		100						105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
	115						120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 88

<211> 165

<212> PRT

<213> Artificial Sequence

<220>

<223> E41H Mutant IFN-alpha 2b

<400> 88

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
			20					25					30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	His	Glu	Phe	Gly	Asn	Gln	Phe	Gln
		35					40					45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
	50					55					60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70					75					80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
				85					90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
		100						105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
	115						120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 89

<211> 165

<212> PRT  
<213> Artificial Sequence

<220>  
<223> E58Q Mutant IFN-alpha 2b

<400> 89  
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
1 5 10 15  
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
20 25 30  
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
35 40 45  
Lys Ala Glu Thr Ile Pro Val Leu His Gln Met Ile Gln Gln Ile Phe  
50 55 60  
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
65 70 75 80  
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
85 90 95  
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
100 105 110  
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
115 120 125  
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
130 135 140  
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
145 150 155 160  
Leu Arg Ser Lys Glu  
165

<210> 90  
<211> 165  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> E58H Mutant IFN-alpha 2b

<400> 90  
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
1 5 10 15  
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
20 25 30  
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
35 40 45  
Lys Ala Glu Thr Ile Pro Val Leu His His Met Ile Gln Gln Ile Phe  
50 55 60  
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
65 70 75 80  
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
85 90 95  
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
100 105 110  
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
115 120 125  
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
130 135 140  
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
145 150 155 160  
Leu Arg Ser Lys Glu  
165

<210> 91

<211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> K70T Mutant IFN-alpha 2b

<400> 91  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Thr Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 92  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> E78Q Mutant IFN-alpha 2b

<400> 92  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Gln Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 93  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> E78H Mutant IFN-alpha 2b

<400> 93  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp His Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 94  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Y89I Mutant IFN-alpha 2b

<400> 94  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Ile Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 95  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> E107Q Mutant IFN-alpha 2b

<400> 95  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Gln Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 96  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> E107H Mutant IFN-alpha 2b

<400> 96  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr His Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu

<210> 97  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> P109A Mutant IFN-alpha 2b

<400> 97  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Ala Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 98  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> L110V Mutant IFN-alpha 2b

<400> 98  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Val Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160

Leu Arg Ser Lys Glu  
165

<210> 99  
<211> 165  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> M111I Mutant IFN-alpha 2b

<400> 99  
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
1 5 10 15  
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
20 25 30  
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
35 40 45  
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
50 55 60  
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
65 70 75 80  
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
85 90 95  
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Ile Lys  
100 105 110  
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
115 120 125  
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
130 135 140  
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
145 150 155 160  
Leu Arg Ser Lys Glu  
165

<210> 100  
<211> 165  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> E113Q Mutant IFN-alpha 2b

<400> 100  
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
1 5 10 15  
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
20 25 30  
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
35 40 45  
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
50 55 60  
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
65 70 75 80  
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
85 90 95  
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
100 105 110  
Gln Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
115 120 125  
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
130 135 140  
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser

145  
Leu Arg Ser Lys Glu  
165

155

160

<210> 101  
<211> 165  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> E113H Mutant IFN-alpha 2b

<400> 101  
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
1 5 10 15  
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
20 25 30  
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
35 40 45  
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
50 55 60  
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
65 70 75 80  
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
85 90 95  
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
100 105 110  
His Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
115 120 125  
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
130 135 140  
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
145 150 155 160  
Leu Arg Ser Lys Glu  
165

<210> 102  
<211> 165  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> L117V Mutant IFN-alpha 2b

<400> 102  
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
1 5 10 15  
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
20 25 30  
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
35 40 45  
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
50 55 60  
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
65 70 75 80  
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
85 90 95  
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
100 105 110  
Glu Asp Ser Ile Val Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
115 120 125  
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
130 135 140



Ala Glu Ile Met Arg Phe Ser Leu Ser Thr Asn Leu Gln Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 103  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> L117I Mutant IFN-alpha 2b

<400> 103  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Ile Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 104  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> K121Q Mutant IFN-alpha 2b

<400> 104  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Gln Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg

130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 105  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> K121T Mutant IFN-alpha 2b

<400> 105  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Thr Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 106  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> R125H Mutant IFN-alpha 2b

<400> 106  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln His Ile Thr Leu  
 115 120 125

Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 107  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> R125Q Mutant IFN-alpha 2b

<400> 107  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Gln Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 108  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> L128V Mutant IFN-alpha 2b

<400> 108  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Val



Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Gln Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 111  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> K131T Mutant IFN-alpha 2b

<400> 111  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Thr Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 112  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> E132Q Mutant IFN-alpha 2b

<400> 112  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys



Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
100 105 110  
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
115 120 125  
Tyr Leu Lys Glu Gln Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
130 135 140  
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
145 150 155 160  
Leu Arg Ser Lys Glu  
165

<210> 115  
<211> 165  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> K133T Mutant IFN-alpha 2b

<400> 115  
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
1 5 10 15  
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
20 25 30  
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
35 40 45  
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
50 55 60  
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
65 70 75 80  
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
85 90 95  
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
100 105 110  
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
115 120 125  
Tyr Leu Lys Glu Thr Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
130 135 140  
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
145 150 155 160  
Leu Arg Ser Lys Glu  
165

<210> 116  
<211> 165  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> K134Q Mutant IFN-alpha 2b

<400> 116  
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
1 5 10 15  
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
20 25 30  
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
35 40 45  
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
50 55 60  
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
65 70 75 80  
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu





Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Ile Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 119  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> P137A Mutant IFN-alpha 2b

<400> 119  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Ala Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 120  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> M148V Mutant IFN-alpha 2b

<400> 120  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu



Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu T Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met His Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 123  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> R149Q Mutant IFN-alpha 2b

<400> 123  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Gln Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 124  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> E159Q Mutant IFN-alpha 2b

<400> 124  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe

50                      55                      60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65                      70                      75                      80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
                     85                      90                      95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
                     100                      105                      110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
                     115                      120                      125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
                     130                      135                      140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Gln Ser  
 145                      150                      155                      160  
 Leu Arg Ser Lys Glu  
                     165

<210> 125  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> E159H Mutant IFN-alpha 2b

<400> 125  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1                      5                      10                      15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
                     20                      25                      30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
                     35                      40                      45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
                     50                      55                      60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65                      70                      75                      80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
                     85                      90                      95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
                     100                      105                      110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
                     115                      120                      125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
                     130                      135                      140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln His Ser  
 145                      150                      155                      160  
 Leu Arg Ser Lys Glu  
                     165

<210> 126  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> P4S Mutant IFN-alpha 2b

<400> 126  
 Cys Asp Leu Ser Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1                      5                      10                      15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
                     20                      25                      30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
                     35                      40                      45

Lys Ala Glu Thr Ile Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 127  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Q5N/H7S Mutant IFN-alpha 2b

<400> 127  
 Cys Asp Leu Pro Asn Thr Ser Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 128  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Q5N/H7T Mutant IFN-alpha 2b

<400> 128  
 Cys Asp Leu Pro Asn Thr Thr Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln

35	40	45
Lys Ala Glu Thr Ile	Pro Val Leu His Glu Met Ile	Gln Gln Ile Phe
50	55	60
Asn Leu Phe Ser Thr	Lys Asp Ser Ser Ala Ala Trp Asp	Glu Thr Leu
65	70	80
Leu Asp Lys Phe Tyr	Thr Glu Leu Tyr Gln Gln Leu Asn Asp	Leu Glu
85	90	95
Ala Cys Val Ile Gln	Gly Val Gly Val Thr Glu Thr Pro	Leu Met Lys
100	105	110
Glu Asp Ser Ile Leu	Ala Val Arg Lys Tyr Phe Gln Arg	Ile Thr Leu
115	120	125
Tyr Leu Lys Glu Lys	Lys Tyr Ser Pro Cys Ala Trp Glu	Val Val Arg
130	135	140
Ala Glu Ile Met Arg	Ser Phe Ser Leu Ser Thr Asn Leu	Gln Glu Ser
145	150	155
Leu Arg Ser Lys Glu		160
165		

<210> 129  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> T6N/S8S Mutant IFN-alpha 2b

<400> 129
Cys Asp Leu Pro Gln Asn His Ser Leu Gly Ser Arg Arg Thr Leu Met
1 5 10 15
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp
20 25 30
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
35 40 45
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
50 55 60
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
65 70 75 80
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu
85 90 95
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys
100 105 110
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu
115 120 125
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg
130 135 140
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser
145 150 155 160
Leu Arg Ser Lys Glu
165

<210> 130  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> S8N/G10S Mutant IFN-alpha 2b

<400> 130
Cys Asp Leu Pro Gln Thr His Asn Leu Ser Ser Arg Arg Thr Leu Met
1 5 10 15
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp
20 25 30

Arg His Asp Phe Gly Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 131  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> S8N/G10T Mutant IFN-alpha 2b

<400> 131  
 Cys Asp Leu Pro Gln Thr His Asn Leu Thr Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 132  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> M21N/R23S Mutant IFN-alpha 2b

<400> 132  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Asn Arg Ser Ile Ser Leu Phe Ser Cys Leu Lys Asp





Leu Leu Ala Gln Met Arg Arg Asn Ser Ser Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 135  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> S25N/F27S Mutant IFN-alpha 2b

<400> 135  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Asn Leu Ser Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 136  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> S25N/F27T Mutant IFN-alpha 2b

<400> 136  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met

1	5	10																	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Asn	Leu	Thr	Ser	Cys	Leu	Lys	Asp				
		20						25					30						
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln				
		35					40					45							
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe				
		50				55					60								
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu				
65					70				75						80				
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu				
				85					90					95					
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys				
		100						105					110						
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu				
		115					120					125							
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg				
		130				135					140								
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser				
145					150					155					160				
Leu	Arg	Ser	Lys	Glu															
				165															

<210> 137  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> L26N/S28S Mutant IFN-alpha 2b

<400> 137																			
Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met				
1				5					10				15						
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Asn	Phe	Ser	Cys	Leu	Lys	Asp				
		20						25				30							
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln				
		35					40					45							
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe				
		50				55					60								
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu				
65					70				75						80				
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu				
				85					90					95					
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys				
		100						105					110						
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu				
		115					120					125							
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg				
		130				135					140								
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser				
145					150					155					160				
Leu	Arg	Ser	Lys	Glu															
				165															

<210> 138  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> L26N/S28T Mutant IFN-alpha 2b

<400> 138

Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Asn Phe Thr Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 139  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> L30N/D32S Mutant IFN-alpha 2b

<400> 139  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Asn Lys Ser  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 140  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> R33N/D35S Mutant IFN-alpha 2b

<400> 140

```
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met
 1          5          10          15
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp
 20          25          30
Asn His Ser Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
 35          40          45
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
 50          55          60
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
 65          70          75          80
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu
 85          90          95
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys
100          105          110
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu
115          120          125
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg
130          135          140
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser
145          150          155          160
Leu Arg Ser Lys Glu
165
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<210> 141

<211> 165

<212> PRT

<213> Artificial Sequence

<220>

<223> R33N/D35T Mutant IFN-alpha 2b

<400> 141

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Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met
 1          5          10          15
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp
 20          25          30
Asn His Thr Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
 35          40          45
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
 50          55          60
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
 65          70          75          80
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu
 85          90          95
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys
100          105          110
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu
115          120          125
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg
130          135          140
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser
145          150          155          160
Leu Arg Ser Lys Glu
165
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<210> 142

<211> 165

<212> PRT

<213> Artificial Sequence

<220>

<223> H34N/F36S Mutant IFN-alpha 2b

<400> 142  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg Asn Asp Ser Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 143  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> H34N/F36T Mutant IFN-alpha 2b

<400> 143  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg Asn Asp Thr Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 144  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>

<223> D35N/G37S Mutant IFN-alpha 2b

<400> 144

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
		20						25					30		
Arg	His	Asn	Phe	Ser	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
		35					40					45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
	50				55						60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70					75					80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
				85					90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
			100					105						110	
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
		115					120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135						140			
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 145

<211> 165

<212> PRT

<213> Artificial Sequence

<220>

<223> F36N/F38S Mutant IFN-alpha 2b

<400> 145

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
		20						25					30		
Arg	His	Asp	Asn	Gly	Ser	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
		35					40					45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
	50				55						60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70					75					80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
				85					90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
			100					105						110	
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
		115					120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135						140			
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 146

<211> 165

<212> PRT

<213> Artificial Sequence

<220>

<223> F36N/F38T Mutant IFN-alpha 2b

<400> 146

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
		20						25					30		
Arg	His	Asp	Asn	Gly	Thr	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
	35					40						45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
	50					55					60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70					75					80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
			85						90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
		100						105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
	115						120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 147

<211> 165

<212> PRT

<213> Artificial Sequence

<220>

<223> G37N/P39T Mutant IFN-alpha 2b

<400> 147

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
		20						25					30		
Arg	His	Asp	Phe	Asn	Phe	Thr	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
	35					40						45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
	50					55					60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70					75					80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
			85						90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
		100						105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
	115						120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 148

<211> 165

<212> PRT

<213> Artificial Sequence

<220>

<223> F38N/Q40S Mutant IFN-alpha 2b

<400> 148

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Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met
 1          5          10          15
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp
 20          25          30
Arg His Asp Phe Gly Asn Pro Ser Glu Glu Phe Gly Asn Gln Phe Gln
 35          40          45
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
 50          55          60
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
 65          70          75          80
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu
 85          90          95
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys
100          105          110
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu
115          120          125
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg
130          135          140
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser
145          150          155          160
Leu Arg Ser Lys Glu
165
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<210> 149

<211> 165

<212> PRT

<213> Artificial Sequence

<220>

<223> F38N/Q40T Mutant IFN-alpha 2b

<400> 149

```
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met
 1          5          10          15
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp
 20          25          30
Arg His Asp Phe Gly Asn Pro Thr Glu Glu Phe Gly Asn Gln Phe Gln
 35          40          45
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
 50          55          60
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
 65          70          75          80
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu
 85          90          95
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys
100          105          110
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu
115          120          125
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg
130          135          140
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser
145          150          155          160
Leu Arg Ser Lys Glu
165
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<210> 150

<211> 165

<212> PRT



<213> Artificial Sequence

<220>

<223> P39N/E41S Mutant IFN-alpha 2b

<400> 150

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
			20					25					30		
Arg	His	Asp	Phe	Gly	Phe	Asn	Gln	Ser	Glu	Phe	Gly	Asn	Gln	Phe	Gln
		35					40					45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
	50					55					60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70					75					80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
				85					90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
		100						105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
	115						120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 151

<211> 165

<212> PRT

<213> Artificial Sequence

<220>

<223> P39N/E41T Mutant IFN-alpha 2b

<400> 151

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
			20					25					30		
Arg	His	Asp	Phe	Gly	Phe	Asn	Gln	Thr	Glu	Phe	Gly	Asn	Gln	Phe	Gln
		35					40					45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
	50					55					60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70					75					80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
				85					90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
		100						105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
	115						120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 152

<211> 165

<212> PRT  
<213> Artificial Sequence

<220>  
<223> Q40N/E42S Mutant IFN-alpha 2b

<400> 152  
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
1 5 10 15  
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
20 25 30  
Arg His Asp Phe Gly Phe Pro Asn Glu Ser Phe Gly Asn Gln Phe Gln  
35 40 45  
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
50 55 60  
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
65 70 75 80  
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
85 90 95  
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
100 105 110  
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
115 120 125  
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
130 135 140  
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
145 150 155 160  
Leu Arg Ser Lys Glu  
165

<210> 153  
<211> 165  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Q40N/E42T Mutant IFN-alpha 2b

<400> 153  
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
1 5 10 15  
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
20 25 30  
Arg His Asp Phe Gly Phe Pro Asn Glu Thr Phe Gly Asn Gln Phe Gln  
35 40 45  
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
50 55 60  
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
65 70 75 80  
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
85 90 95  
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
100 105 110  
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
115 120 125  
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
130 135 140  
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
145 150 155 160  
Leu Arg Ser Lys Glu  
165

<210> 154

<211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> E41N/F43S Mutant IFN-alpha 2b

<400> 154  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Asn Glu Ser Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 155  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> E41N/F43T Mutant IFN-alpha 2b

<400> 155  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Asn Glu Thr Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 156  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> G44N/Q46S Mutant IFN-alpha 2b

<400> 156  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Asn Asn Ser Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 157  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> G44N/Q46T Mutant IFN-alpha 2b

<400> 157  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Asn Asn Thr Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 158  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> N45N/F47S Mutant IFN-alpha 2b

<400> 158  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Ser Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 159  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> N45N/F47T Mutant IFN-alpha 2b

<400> 159  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Thr Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu

<210> 160  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Q46N/Q48S Mutant IFN-alpha 2b

<400> 160  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Asn Phe Ser  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 161  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Q46N/Q48T Mutant IFN-alpha 2b

<400> 161  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Asn Phe Thr  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160

Leu Arg Ser Lys Glu  
165

<210> 162  
<211> 165  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> F47N/K49S Mutant IFN-alpha 2b

<400> 162  
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
1 5 10 15  
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
20 25 30  
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Asn Gln  
35 40 45  
Ser Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
50 55 60  
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
65 70 75 80  
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
85 90 95  
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
100 105 110  
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
115 120 125  
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
130 135 140  
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
145 150 155 160  
Leu Arg Ser Lys Glu  
165

<210> 163  
<211> 165  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> F47N/K49T Mutant IFN-alpha 2b

<400> 163  
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
1 5 10 15  
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
20 25 30  
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Asn Gln  
35 40 45  
Thr Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
50 55 60  
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
65 70 75 80  
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
85 90 95  
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
100 105 110  
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
115 120 125  
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
130 135 140  
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser

145  
Leu Arg Ser Lys Glu  
165

155

160

<210> 164  
<211> 165  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> K49N/E51S Mutant IFN-alpha 2b

<400> 164  
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
1 5 10 15  
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
20 25 30  
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
35 40 45  
Asn Ala Ser Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
50 55 60  
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
65 70 75 80  
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
85 90 95  
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
100 105 110  
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
115 120 125  
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
130 135 140  
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
145 150 155 160  
Leu Arg Ser Lys Glu  
165

<210> 165  
<211> 165  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> A75N/D77S Mutant IFN-alpha 2b

<400> 165  
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
1 5 10 15  
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
20 25 30  
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
35 40 45  
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
50 55 60  
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Asn Trp Ser Glu Thr Leu  
65 70 75 80  
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
85 90 95  
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
100 105 110  
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
115 120 125  
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
130 135 140



Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 166  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> I100N/G102S Mutant IFN-alpha 2b

<400> 166  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Asn Gln Ser Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 167  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> I100N/G102T Mutant IFN-alpha 2b

<400> 167  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Asn Gln Thr Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg

130	135	140
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser		
145	150	155
Leu Arg Ser Lys Glu		160
165		

<210> 168  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> V103N/V105S Mutant IFN-alpha 2b

<400> 168

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
		20						25					30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
	35						40					45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
	50					55					60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70				75						80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
			85						90					95	
Ala	Cys	Val	Ile	Gln	Gly	Asn	Gly	Ser	Thr	Glu	Thr	Pro	Leu	Met	Lys
		100						105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
	115						120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 169  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> V103N/V105T Mutant IFN-alpha 2b

<400> 169

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
		20						25					30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
	35						40					45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
	50					55					60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70				75						80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
			85						90					95	
Ala	Cys	Val	Ile	Gln	Gly	Asn	Gly	Thr	Thr	Glu	Thr	Pro	Leu	Met	Lys
		100						105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
	115						120					125			

Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 170  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> G104N/T106T Mutant IFN-alpha 2b

<400> 170  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Asn Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 171  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> V105N/E107S Mutant IFN-alpha 2b

<400> 171  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Asn Thr Ser Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu

	115		120		125										
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 172  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> T106N/T108S Mutant IFN-alpha 2b

<400> 172

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
		20					25						30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
	35					40						45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
	50				55						60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65				70					75					80	
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
			85						90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Asn	Glu	Ser	Pro	Leu	Met	Lys
		100				105							110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
	115					120						125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 173  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> T106N/T108T Mutant IFN-alpha 2b

<400> 173

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
		20					25						30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
	35					40						45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
	50				55						60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65				70					75					80	
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
			85						90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Asn	Glu	Thr	Pro	Leu	Met	Lys
		100				105							110		

Glu Asp Ser Ile Leu Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 174  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> E107N/P109S Mutant IFN-alpha 2b

<400> 174  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Asn Thr Ser Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 175  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> E107N/P109T Mutant IFN-alpha 2b

<400> 175  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Asn Thr Thr Leu Met Lys



Ala	Cys	Val	Ile	Gln	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
		100					105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr
		115					120				125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val
		130				135					140			
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Asn	Gln	Ser
					150					155				160
Leu	Arg	Ser	Lys	Glu										
				165										

<210> 178  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> L157N/E159T Mutant IFN-alpha 2b

<400> 178
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met
1 5 10 15
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp
20 25 30
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
35 40 45
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
50 55 60
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
65 70 75 80
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu
85 90 95
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys
100 105 110
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu
115 120 125
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg
130 135 140
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Asn Gln Thr Ser
145 150 155 160
Leu Arg Ser Lys Glu
165

<210> 179  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Q158N/S160T Mutant IFN-alpha 2b

<400> 179
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met
1 5 10 15
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp
20 25 30
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
35 40 45
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
50 55 60
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
65 70 75 80
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu

			85				90				95				
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
			100					105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
			115					120				125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
			130					135				140			
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Asn	Glu	Thr
			145					150			155				160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 180  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> E159N/L161S Mutant IFN-alpha 2b

<400> 180															
Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
			20					25					30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
			35					40				45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
			50				55				60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
					70				75						80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
				85					90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
			100					105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
			115					120				125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
			130					135				140			
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Asn	Ser
			145					150			155				160
Ser	Arg	Ser	Lys	Glu											
				165											

<210> 181  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> E159N/L161T Mutant IFN-alpha 2b

<400> 181															
Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
			20					25					30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
			35					40				45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
			50				55				60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
					70				75						80





50		55		60											
Phe	Asn	Leu	Phe	Ser	Thr	Glu	Asp	Ser	Ser	Ala	Ala	Trp	Glu	Gln	Ser
65					70					75					80
Leu	Leu	Glu	Lys	Phe	Ser	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu
				85					90					95	
Glu	Ala	Cys	Val	Ile	Gln	Glu	Val	Gly	Val	Glu	Glu	Thr	Pro	Leu	Met
			100					105					110		
Asn	Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr
	115						120					125			
Leu	Tyr	Leu	Ile	Glu	Arg	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val
	130					135					140				
Arg	Ala	Glu	Ile	Met	Arg	Ser	Leu	Ser	Phe	Ser	Thr	Asn	Leu	Gln	Lys
145					150					155					160
Arg	Leu	Arg	Arg	Lys	Asp										
				165											

<210> 184  
 <211> 174  
 <212> PRT  
 <213> Marmota monax

<300>  
 <308> Genbank AAL76913  
 <309> 2002-02-12

<400> 184
Cys Asp Leu Pro Gln Ile His Asn Leu Gly Leu Glu Thr Ser Glu Glu
1 5 10 15
Asn Glu Glu Gly Ala Leu Thr Leu Leu Glu Lys Met Arg Arg Ile Pro
20 25 30
Ile Phe Ser Cys Leu Asn Tyr Arg Lys Asp Phe Ala Phe Pro Gln Glu
35 40 45
Gln Leu Glu Gly Glu Gln Val Gln Lys Ala Gln Ala Val Ala Val Leu
50 55 60
His Gln Met Thr Gln Gln Ile Leu Asn Leu Phe Ser Thr Gln Lys Ala
65 70 75 80
Phe Ala Ala Trp Asp Lys Thr Leu Leu Asp Thr Phe Leu Ser Gly Leu
85 90 95
Tyr Gln Leu Leu Asp Asp Leu Lys Ala Cys Gly Ser Lys Gln Val Gly
100 105 110
Val Glu Glu Ala Val Arg Lys Tyr Phe His Arg Ile Thr Val Tyr Leu
115 120 125
Lys Glu Lys Lys Tyr Leu Pro Cys Ala Trp Glu Val Val Arg Thr Glu
130 135 140
Ile Met Lys Ser Phe Ser Leu Ser Val Asn Leu Tyr Glu Arg Leu Arg
145 150 155 160
Ser Met Glu Gly Asp Leu Val Gln Gln Gly Asn Ala Ser His
165 170

<210> 185  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

<400> 185
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met
1 5 10 15
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp
20 25 30
Arg Arg Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
35 40 45
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
50 55 60

Asn Leu Phe Ser Thr Dye Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu  
 165

<210> 186  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<300>  
 <308> Genbank AAB59403  
 <309> 1994-11-15

<400> 186  
 Cys Asp Leu Pro Glu Thr His Ser Leu Asp Asn Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Ser Arg Ile Ser Pro Ser Ser Cys Leu Met Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Asp Gly Asn Gln Phe  
 35 40 45  
 Gln Lys Ala Pro Ala Ile Ser Val Leu His Glu Leu Ile Gln Gln Ile  
 50 55 60  
 Phe Asn Leu Phe Thr Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Asp  
 65 70 75 80  
 Leu Leu Asp Lys Phe Cys Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu  
 85 90 95  
 Glu Ala Cys Val Met Gln Glu Glu Arg Val Gly Glu Thr Pro Leu Met  
 100 105 110  
 Asn Ala Asp Ser Ile Leu Ala Val Lys Lys Tyr Phe Arg Arg Ile Thr  
 115 120 125  
 Leu Tyr Leu Thr Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val  
 130 135 140  
 Arg Ala Glu Ile Met Arg Ser Leu Ser Leu Ser Thr Asn Leu Gln Glu  
 145 150 155 160  
 Arg Leu Arg Arg Lys Glu  
 165

<210> 187  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<300>  
 <308> Genbank CAA26702  
 <309> 1995-03-30

<400> 187  
 Cys Asp Leu Pro Gln Thr His Ser Leu Ser Asn Arg Arg Thr Leu Met  
 1 5 10 15  
 Ile Met Ala Gln Met Gly Arg Ile Ser Pro Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Asp Gly Asn Gln Phe

35	40	45
Gln Lys Ala Gln Ala Ile Ser Val Leu His Glu Met Ile Gln Gln Thr		
50	55	60
Phe Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Thr Trp Asp Glu Thr		
65	70	75
Leu Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu		80
	85	90
Glu Ala Cys Met Met Gln Glu Val Gly Val Glu Asp Thr Pro Leu Met		95
	100	105
Asn Val Asp Ser Ile Leu Thr Val Arg Lys Tyr Phe Gln Arg Ile Thr		110
	115	120
Leu Tyr Leu Thr Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val		125
	130	135
Arg Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Ala Asn Leu Gln Glu		140
	145	150
Arg Leu Arg Arg Lys Glu		155
	160	
	165	

<210> 188  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<300>  
 <308> Genbank CAA26704  
 <309> 1995-03-30

<400> 188
Cys Asp Leu Pro Gln Thr His Ser Leu Gly His Arg Arg Thr Met Met
1 5 10 15
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp
20 25 30
Arg His Asp Phe Arg Phe Pro Gln Glu Glu Phe Asp Gly Asn Gln Phe
35 40 45
Gln Lys Ala Glu Ala Ile Ser Val Leu His Glu Val Ile Gln Gln Thr
50 55 60
Phe Asn Leu Phe Ser Thr Lys Asp Ser Ser Val Ala Trp Asp Glu Arg
65 70 75 80
Leu Leu Asp Lys Leu Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu
85 90 95
Glu Ala Cys Val Met Gln Glu Val Trp Val Gly Gly Thr Pro Leu Met
100 105 110
Asn Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr
115 120 125
Leu Tyr Leu Thr Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val
130 135 140
Arg Ala Glu Ile Met Arg Ser Phe Ser Ser Ser Arg Asn Leu Gln Glu
145 150 155 160
Arg Leu Arg Arg Lys Glu
165

<210> 189  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<300>  
 <308> Genbank NP\_066546  
 <309> 2000-11-02

<400> 189
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Asn Arg Arg Ala Leu Ile
1 5 10 15

Leu Leu Ala Gln Met Gly Arg Ile Ser His Phe Ser Cys Leu Lys Asp  
           20                          25                          30  
 Arg His Asp Phe Gly Phe Pro Glu Glu Phe Asp Gly His Gln Phe  
           35                          40                          45  
 Gln Lys Ala Gln Ala Ile Ser Val Leu His Glu Met Ile Gln Gln Thr  
           50                          55                          60  
 Phe Asn Leu Phe Ser Thr Glu Asp Ser Ser Ala Ala Trp Glu Gln Ser  
           65                          70                          75                          80  
 Leu Leu Glu Lys Phe Ser Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu  
                           85                          90                          95  
 Glu Ala Cys Val Ile Gln Glu Val Gly Val Glu Glu Thr Pro Leu Met  
                           100                          105                          110  
 Asn Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr  
                           115                          120                          125  
 Leu Tyr Leu Thr Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val  
                           130                          135                          140  
 Arg Ala Glu Ile Met Arg Ser Leu Ser Phe Ser Thr Asn Leu Gln Lys  
           145                          150                          155                          160  
 Arg Leu Arg Arg Lys Asp  
                           165

<210> 190

<211> 166

<212> PRT

<213> Homo sapiens

<300>

<308> Genbank CAA26701

<309> 1995-03-30

<400> 190

Cys Asp Leu Pro Gln Thr His Ser Leu Gly Asn Arg Arg Ala Leu Ile  
   1                          5                          10                          15  
 Leu Leu Ala Gln Met Gly Arg Ile Ser His Phe Ser Cys Leu Lys Asp  
           20                          25                          30  
 Arg His Asp Phe Gly Phe Pro Glu Glu Glu Phe Asp Gly His Gln Phe  
           35                          40                          45  
 Gln Lys Thr Gln Ala Ile Ser Val Leu His Glu Met Ile Gln Gln Thr  
           50                          55                          60  
 Phe Asn Leu Phe Ser Thr Glu Asp Ser Ser Ala Ala Trp Glu Gln Ser  
           65                          70                          75                          80  
 Leu Leu Glu Lys Phe Ser Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu  
                           85                          90                          95  
 Glu Ala Cys Val Ile Gln Glu Val Gly Val Glu Glu Thr Pro Leu Met  
                           100                          105                          110  
 Asn Val Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr  
                           115                          120                          125  
 Leu Tyr Leu Thr Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val  
                           130                          135                          140  
 Arg Ala Glu Ile Met Arg Ser Leu Ser Phe Ser Thr Asn Leu Gln Lys  
           145                          150                          155                          160  
 Arg Leu Arg Arg Lys Asp  
                           165

<210> 191

<211> 166

<212> PRT

<213> Homo sapiens

<300>

<308> Genbank AAA52725

<309> 1994-11-08

<400> 191

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Asn	Arg	Arg	Ala	Leu	Ile
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Gly	Arg	Ile	Ser	Pro	Phe	Ser	Cys	Leu	Lys	Asp
			20					25					30		
Arg	His	Asp	Phe	Gly	Leu	Pro	Gln	Glu	Glu	Phe	Asp	Gly	Asn	Gln	Phe
		35					40					45			
Gln	Lys	Thr	Gln	Ala	Ile	Ser	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Thr
	50					55					60				
Phe	Asn	Leu	Phe	Ser	Thr	Glu	Asp	Ser	Ser	Ala	Ala	Trp	Glu	Gln	Ser
65					70					75				80	
Leu	Leu	Glu	Lys	Phe	Ser	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asn	Leu
			85						90				95		
Glu	Ala	Cys	Val	Ile	Gln	Glu	Val	Gly	Met	Glu	Glu	Thr	Pro	Leu	Met
		100						105					110		
Asn	Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr
		115					120					125			
Leu	Tyr	Leu	Thr	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val
	130					135					140				
Arg	Ala	Glu	Ile	Met	Arg	Ser	Leu	Ser	Phe	Ser	Thr	Asn	Leu	Gln	Lys
145					150					155				160	
Ile	Leu	Arg	Arg	Lys	Asp										
				165											

<210> 192

<211> 166

<212> PRT

<213> Homo sapiens

<300>

<308> Genbank CAA23792

<309> 1994-08-04

<400> 192

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Arg	Asn	Arg	Arg	Ala	Leu	Ile
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Gly	Arg	Ile	Ser	Pro	Phe	Ser	Cys	Leu	Lys	Asp
			20					25					30		
Arg	His	Glu	Phe	Arg	Phe	Pro	Glu	Glu	Glu	Phe	Asp	Gly	His	Gln	Phe
		35					40					45			
Gln	Lys	Thr	Gln	Ala	Ile	Ser	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Thr
	50					55					60				
Phe	Asn	Leu	Phe	Ser	Thr	Glu	Asp	Ser	Ser	Ala	Ala	Trp	Glu	Gln	Ser
65					70					75				80	
Leu	Leu	Glu	Lys	Phe	Ser	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu
			85						90				95		
Glu	Ala	Cys	Val	Ile	Gln	Glu	Val	Gly	Val	Glu	Glu	Thr	Pro	Leu	Met
		100						105					110		
Asn	Glu	Asp	Phe	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr
		115					120					125			
Leu	Tyr	Leu	Met	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val
	130					135					140				
Arg	Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Phe	Ser	Thr	Asn	Leu	Lys	Lys
145					150					155				160	
Gly	Leu	Arg	Arg	Lys	Asp										
				165											

<210> 193

<211> 166

<212> PRT

<213> Homo sapiens

<300>  
 <308> Genbank CAA23794  
 <309> 1994-12-17

<400> 193  
 Cys Asn Leu Ser Gln Thr His Ser Leu Asn Asn Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Met Ala Gln Met Arg Arg Ile Ser Pro Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Glu Phe Pro Gln Glu Glu Phe Asp Gly Asn Gln Phe  
 35 40 45  
 Gln Lys Ala Gln Ala Ile Ser Val Leu His Glu Met Met Gln Gln Thr  
 50 55 60  
 Phe Asn Leu Phe Ser Thr Lys Asn Ser Ser Ala Ala Trp Asp Glu Thr  
 65 70 75 80  
 Leu Leu Glu Lys Phe Tyr Ile Glu Leu Phe Gln Gln Met Asn Asp Leu  
 85 90 95  
 Glu Ala Cys Val Ile Gln Glu Val Gly Val Glu Glu Thr Pro Leu Met  
 100 105 110  
 Asn Glu Asp Ser Ile Leu Ala Val Lys Lys Tyr Phe Gln Arg Ile Thr  
 115 120 125  
 Leu Tyr Leu Met Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val  
 130 135 140  
 Arg Ala Glu Ile Met Arg Ser Leu Ser Phe Ser Thr Asn Leu Gln Lys  
 145 150 155 160  
 Arg Leu Arg Arg Lys Asp  
 165

<210> 194  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<300>  
 <308> Genbank AAA52718  
 <309> 1994-11-08

<400> 194  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Asn Arg Arg Ala Leu Ile  
 1 5 10 15  
 Leu Leu Ala Gln Met Gly Arg Ile Ser Pro Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Asp Gly Asn Gln Phe  
 35 40 45  
 Gln Lys Ala Gln Ala Ile Ser Val Leu His Glu Met Ile Gln Gln Thr  
 50 55 60  
 Phe Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Thr Trp Glu Gln Ser  
 65 70 75 80  
 Leu Leu Glu Lys Phe Ser Thr Glu Leu Asn Gln Gln Leu Asn Asp Leu  
 85 90 95  
 Glu Ala Cys Val Ile Gln Glu Val Gly Val Glu Glu Thr Pro Leu Met  
 100 105 110  
 Asn Val Asp Ser Ile Leu Ala Val Lys Lys Tyr Phe Gln Arg Ile Thr  
 115 120 125  
 Leu Tyr Leu Thr Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val  
 130 135 140  
 Arg Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Lys Ile Phe Gln Glu  
 145 150 155 160  
 Arg Leu Arg Arg Lys Glu  
 165

<210> 195  
 <211> 166

<212> PRT  
<213> Homo sapiens

<300>  
<308> Genbank CAA26903  
<309> 1995-03-30

<400> 195  
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Asn Arg Arg Ala Leu Ile  
1 5 10 15  
Leu Leu Ala Gln Met Arg Arg Ile Ser Pro Phe Ser Cys Leu Lys Asp  
20 25 30  
Arg His Asp Phe Glu Phe Pro Gln Glu Glu Phe Asp Asp Lys Gln Phe  
35 40 45  
Gln Lys Ala Gln Ala Ile Ser Val Leu His Glu Met Ile Gln Gln Thr  
50 55 60  
Phe Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Leu Asp Glu Thr  
65 70 75 80  
Leu Leu Asp Glu Phe Tyr Ile Glu Leu Asp Gln Gln Leu Asn Asp Leu  
85 90 95  
Glu Ser Cys Val Met Gln Glu Val Gly Val Ile Glu Ser Pro Leu Met  
100 105 110  
Tyr Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr  
115 120 125  
Leu Tyr Leu Thr Glu Lys Lys Tyr Ser Ser Cys Ala Trp Glu Val Val  
130 135 140  
Arg Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Ile Asn Leu Gln Lys  
145 150 155 160  
Arg Leu Lys Ser Lys Glu  
165

<210> 196  
<211> 166  
<212> PRT  
<213> Homo sapiens

<300>  
<308> Genbank AAC41702  
<309> 1995-01-01

<400> 196  
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
1 5 10 15  
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
20 25 30  
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
35 40 45  
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
50 55 60  
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
65 70 75 80  
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
85 90 95  
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
100 105 110  
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
115 120 125  
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
130 135 140  
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
145 150 155 160  
Thr Gly Tyr Leu Arg Asn  
165



<210> 197  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<300>  
 <308> Genbank CAA23795  
 <309> 1993-09-12

<400> 197  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 198  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<300>  
 <308> Genbank CAA00839  
 <309> 1993-12-03

<400> 198  
 Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln  
 1 5 10 15  
 Pro Leu Thr Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu  
 20 25 30  
 Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met  
 35 40 45  
 Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro  
 50 55 60  
 Lys Met Ala Glu Lys Asp Gly Cys Phe Gln Ser Gly Phe Asn Glu Glu  
 65 70 75 80  
 Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr  
 85 90 95  
 Leu Glu Tyr Leu Gln Asn Arg Phe Glu Ser Ser Glu Glu Gln Ala Arg  
 100 105 110  
 Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys  
 115 120 125  
 Ala Lys Asn Leu Asp Ala Ile Thr Thr Pro Asp Pro Thr Thr Asn Ala  
 130 135 140  
 Ser Leu Leu Thr Lys Leu Gln Ala Gln Asn Gln Trp Leu Gln Asp Met

145  
 Thr Thr His Leu Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser  
 165 170 175  
 Leu Arg Ala Leu Arg Gln Met  
 180

<210> 199  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

<300>  
 <308> Genbank CAA31639  
 <309> 1994-11-15

<400> 199  
 Cys Tyr Cys Gln Asp Pro Tyr Val Lys Glu Ala Glu Asn Leu Lys Lys  
 1 5 10 15  
 Tyr Phe Asn Ala Gly His Ser Asp Val Ala Asp Asn Gly Thr Leu Phe  
 20 25 30  
 Leu Gly Ile Leu Lys Asn Trp Lys Glu Glu Ser Asp Arg Lys Ile Met  
 35 40 45  
 Gln Ser Gln Ile Val Ser Phe Tyr Phe Lys Leu Phe Lys Asn Phe Lys  
 50 55 60  
 Asp Asp Gln Ser Ile Gln Lys Ser Val Glu Thr Ile Lys Glu Asp Met  
 65 70 75 80  
 Asn Val Lys Phe Phe Asn Ser Asn Lys Lys Lys Arg Asp Asp Phe Glu  
 85 90 95  
 Lys Leu Thr Asn Tyr Ser Val Thr Asp Leu Asn Val Gln Arg Lys Ala  
 100 105 110  
 Ile His Glu Leu Ile Gln Val Met Ala Glu Leu Ser Pro Ala Ala Lys  
 115 120 125  
 Thr Gly Lys Arg Lys Arg Ser Gln Met Leu Phe Gln Gly Arg Arg Ala  
 130 135 140  
 Ser Gln  
 145

<210> 200  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<300>  
 <308> Genbank NP\_000563  
 <309> 2000-10-31

<400> 200  
 Ser Pro Gly Gln Gly Thr Gln Ser Glu Asn Ser Cys Thr His Phe Pro  
 1 5 10 15  
 Gly Asn Leu Pro Asn Met Leu Arg Asp Leu Arg Asp Ala Phe Ser Arg  
 20 25 30  
 Val Lys Thr Phe Phe Gln Met Lys Asp Gln Leu Asp Asn Leu Leu Leu  
 35 40 45  
 Lys Glu Ser Leu Leu Glu Asp Phe Lys Gly Tyr Leu Gly Cys Gln Ala  
 50 55 60  
 Leu Ser Glu Met Ile Gln Phe Tyr Leu Glu Glu Val Met Pro Gln Ala  
 65 70 75 80  
 Glu Asn Gln Asp Pro Asp Ile Lys Ala His Val Asn Ser Leu Gly Glu  
 85 90 95  
 Asn Leu Lys Thr Leu Arg Leu Arg Leu Arg Arg Cys His Arg Phe Leu  
 100 105 110  
 Pro Cys Glu Asn Lys Ser Lys Ala Val Glu Gln Val Lys Asn Ala Phe  
 115 120 125

Asn Lys Leu Gln Glu Lys Gly Ile Tyr Lys Ala Met Ser Glu Phe Asp  
 130 135 140  
 Ile Phe Ile Asn Tyr Ile Glu Ala Tyr Met Thr Met Lys Ile Arg Asn  
 145 150 155 160

<210> 201  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<300>  
 <308> Genbank AAA52400  
 <309> 1994-11-08

<400> 201  
 Ala Pro Pro Arg Leu Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu  
 1 5 10 15  
 Leu Glu Ala Lys Glu Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His  
 20 25 30  
 Cys Ser Leu Asn Glu Asn Ile Thr Val Pro Asp Thr Lys Val Asn Phe  
 35 40 45  
 Tyr Ala Trp Lys Arg Met Glu Val Gly Gln Gln Ala Val Glu Val Trp  
 50 55 60  
 Gln Gly Leu Ala Leu Leu Ser Glu Ala Val Leu Arg Gly Gln Ala Leu  
 65 70 75 80  
 Leu Val Asn Ser Ser Gln Pro Trp Glu Pro Leu Gln Leu His Val Asp  
 85 90 95  
 Lys Ala Val Ser Gly Leu Arg Ser Leu Thr Thr Leu Leu Arg Ala Leu  
 100 105 110  
 Gly Ala Gln Lys Glu Ala Ile Ser Pro Pro Asp Ala Ala Ser Ala Ala  
 115 120 125  
 Pro Leu Arg Thr Ile Thr Ala Asp Thr Phe Arg Lys Leu Phe Arg Val  
 130 135 140  
 Tyr Ser Asn Phe Leu Arg Gly Lys Leu Lys Leu Tyr Thr Gly Glu Ala  
 145 150 155 160  
 Cys Arg Thr Gly Asp Arg  
 165

<210> 202  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<300>  
 <308> Genbank AAA98768  
 <309> 1996-05-02

<400> 202  
 Ala Pro Ala Arg Ser Pro Ser Pro Ser Thr Gln Pro Trp Glu His Val  
 1 5 10 15  
 Asn Ala Ile Gln Glu Ala Arg Arg Leu Leu Asn Leu Ser Arg Asp Thr  
 20 25 30  
 Ala Ala Glu Met Asn Glu Thr Val Glu Val Ile Ser Glu Met Phe Asp  
 35 40 45  
 Leu Gln Glu Pro Thr Cys Leu Gln Thr Arg Leu Glu Leu Tyr Lys Gln  
 50 55 60  
 Gly Leu Arg Gly Ser Leu Thr Lys Leu Lys Gly Pro Leu Thr Met Met  
 65 70 75 80  
 Ala Ser His Tyr Lys Gln His Cys Pro Pro Thr Pro Glu Thr Ser Cys  
 85 90 95  
 Ala Thr Gln Ile Ile Thr Phe Glu Ser Phe Lys Glu Asn Leu Lys Asp

100 105 110  
Phe Leu Leu Val Ile Pro Phe Asp Cys Trp Glu Pro Val Gln Glu  
115 120 125

<210> 203  
<211> 209  
<212> PRT  
<213> Homo sapiens

<300>  
<308> Genbank AAA19825  
<309> 1994-07-19

<400> 203  
Thr Gln Asp Cys Ser Phe Gln His Ser Pro Ile Ser Ser Asp Phe Ala  
1 5 10 15  
Val Lys Ile Arg Glu Leu Ser Asp Tyr Leu Leu Gln Asp Tyr Pro Val  
20 25 30  
Thr Val Ala Ser Asn Leu Gln Asp Glu Glu Leu Cys Gly Gly Leu Trp  
35 40 45  
Arg Leu Val Leu Ala Gln Arg Trp Met Glu Arg Leu Lys Thr Val Ala  
50 55 60  
Gly Ser Lys Met Gln Gly Leu Leu Glu Arg Val Asn Thr Glu Ile His  
65 70 75 80  
Phe Val Thr Lys Cys Ala Phe Gln Pro Pro Pro Ser Cys Leu Arg Phe  
85 90 95  
Val Gln Thr Asn Ile Ser Arg Leu Leu Gln Glu Thr Ser Glu Gln Leu  
100 105 110  
Val Ala Leu Lys Pro Trp Ile Thr Arg Gln Asn Phe Ser Arg Cys Leu  
115 120 125  
Glu Leu Gln Cys Gln Pro Asp Ser Ser Thr Leu Pro Pro Pro Trp Ser  
130 135 140  
Pro Arg Pro Leu Glu Ala Thr Ala Pro Thr Ala Pro Gln Pro Pro Leu  
145 150 155 160  
Leu Leu Leu Leu Leu Leu Pro Val Gly Leu Leu Leu Leu Ala Ala Ala  
165 170 175  
Trp Cys Leu His Trp Gln Arg Thr Arg Arg Arg Thr Pro Arg Pro Gly  
180 185 190  
Glu Gln Val Pro Pro Val Pro Ser Pro Gln Asp Leu Leu Leu Val Glu  
195 200 205  
His

<210> 204  
<211> 133  
<212> PRT  
<213> Homo sapiens

<300>  
<308> Genbank AAD48509  
<309> 1999-08-11

<400> 204  
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His  
1 5 10 15  
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys  
20 25 30  
Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys  
35 40 45  
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys  
50 55 60  
Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu  
65 70 75 80

Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu  
85 90 95  
Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala  
100 105 110  
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile  
115 120 125  
Ile Ser Thr Leu Thr  
130

<210> 205  
<211> 133  
<212> PRT  
<213> Homo sapiens

<300>  
<308> Genbank AAA59146  
<309> 1995-01-06

<400> 205  
Ala Pro Met Thr Gln Thr Thr Pro Leu Lys Thr Ser Trp Val Asn Cys  
1 5 10 15  
Ser Asn Met Ile Asp Glu Ile Ile Thr His Leu Lys Gln Pro Pro Leu  
20 25 30  
Pro Leu Leu Asp Phe Asn Asn Leu Asn Gly Glu Asp Gln Asp Ile Leu  
35 40 45  
Met Glu Asn Asn Leu Arg Arg Pro Asn Leu Glu Ala Phe Asn Arg Ala  
50 55 60  
Val Lys Ser Leu Gln Asn Ala Ser Ala Ile Glu Ser Ile Leu Lys Asn  
65 70 75 80  
Leu Leu Pro Cys Leu Pro Leu Ala Thr Ala Ala Pro Thr Arg His Pro  
85 90 95  
Ile His Ile Lys Asp Gly Asp Trp Asn Glu Phe Arg Arg Lys Leu Thr  
100 105 110  
Phe Tyr Leu Lys Thr Leu Glu Asn Ala Gln Ala Gln Gln Thr Thr Leu  
115 120 125  
Ser Leu Ala Ile Phe  
130

<210> 206  
<211> 248  
<212> PRT  
<213> Homo sapiens

<300>  
<308> Genbank AAA85450  
<309> 1996-01-19

<400> 206  
Glu Gly Ile Cys Arg Asn Arg Val Thr Asn Asn Val Lys Asp Val Thr  
1 5 10 15  
Lys Leu Val Ala Asn Leu Pro Lys Asp Tyr Met Ile Thr Leu Lys Tyr  
20 25 30  
Val Pro Gly Met Asp Val Leu Pro Ser His Cys Trp Ile Ser Glu Met  
35 40 45  
Val Val Gln Leu Ser Asp Ser Leu Thr Asp Leu Leu Asp Lys Phe Ser  
50 55 60  
Asn Ile Ser Glu Gly Leu Ser Asn Tyr Ser Ile Ile Asp Lys Leu Val  
65 70 75 80  
Asn Ile Val Asp Asp Leu Val Glu Cys Val Lys Glu Asn Ser Ser Lys  
85 90 95  
Asp Leu Lys Lys Ser Phe Lys Ser Pro Glu Pro Arg Leu Phe Thr Pro  
100 105 110  
Glu Glu Phe Phe Arg Ile Phe Asn Arg Ser Ile Asp Ala Phe Lys Asp

115	Phe Val Ala Ser Glu Thr Ser Asp Cys Val Val Ser Ser Thr Leu	120		125
130	Ser Pro Glu Lys Asp Ser Arg Val Ser Val Thr Lys Pro Phe Met Leu	135		140
145	Pro Pro Val Ala Ala Ser Ser Leu Arg Asn Asp Ser Ser Ser Ser Asn	150		155
		165		170
165	Arg Lys Ala Lys Asn Pro Pro Gly Asp Ser Ser Leu His Trp Ala Ala	175		180
180	Met Ala Leu Pro Ala Leu Phe Ser Leu Ile Ile Gly Phe Ala Phe Gly	185		190
195	Ala Leu Tyr Trp Lys Lys Arg Gln Pro Ser Leu Thr Arg Ala Val Glu	200		205
210	Asn Ile Gln Ile Asn Glu Asp Asn Glu Ile Ser Met Leu Gln Glu	215		220
225	Lys Glu Arg Glu Phe Gln Glu Val	230		235
		245		240

<210> 207  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<300>  
 <308> Genbank AAA59149  
 <309> 1995-01-06

<400> 207

His Lys Cys Asp Ile Thr Leu Gln Glu Ile Ile Lys Thr Leu Asn Ser	
1 5 10 15	
Leu Thr Glu Gln Lys Thr Leu Cys Thr Glu Leu Thr Val Thr Asp Ile	
20 25 30	
Phe Ala Ala Ser Lys Asn Thr Thr Glu Lys Glu Thr Phe Cys Arg Ala	
35 40 45	
Ala Thr Val Leu Arg Gln Phe Tyr Ser His His Glu Lys Asp Thr Arg	
50 55 60	
Cys Leu Gly Ala Thr Ala Gln Gln Phe His Arg His Lys Gln Leu Ile	
65 70 75 80	
Arg Phe Leu Lys Arg Leu Asp Arg Asn Leu Trp Gly Leu Ala Gly Leu	
85 90 95	
Asn Ser Cys Pro Val Lys Glu Ala Asn Gln Ser Thr Leu Glu Asn Phe	
100 105 110	
Leu Glu Arg Leu Lys Thr Ile Met Arg Glu Lys Tyr Ser Lys Cys Ser	
115 120 125	

Ser

<210> 208  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<300>  
 <308> Genbank CAA28390  
 <309> 1995-03-21

<400> 208

Ile Pro Thr Glu Ile Pro Thr Ser Ala Leu Val Lys Glu Thr Leu Ala	
1 5 10 15	
Leu Leu Ser Thr His Arg Thr Leu Leu Ile Ala Asn Glu Thr Leu Arg	
20 25 30	
Ile Pro Val Pro Val His Lys Asn His Gln Leu Cys Thr Glu Glu Ile	

35 40 45  
 Phe Gln Gly Ile Gly Thr Leu Glu Ser Gln Thr Val Gln Gly Gly Thr  
 50 55 60  
 Val Glu Arg Leu Phe Lys Asn Leu Ser Leu Ile Lys Lys Tyr Ile Asp  
 65 70 75 80  
 Gly Gln Lys Lys Lys Cys Gly Glu Glu Arg Arg Arg Val Asn Gln Phe  
 85 90 95  
 Leu Asp Tyr Leu Gln Glu Phe Leu Gly Val Met Asn Thr Glu Trp Ile  
 100 105 110  
 Ile Glu Ser  
 115

<210> 209  
 <211> 112  
 <212> PRT  
 <213> Homo sapiens

<300>  
 <308> Genbank NP\_002179  
 <309> 2000-10-31

<400> 209  
 Gly Pro Val Pro Pro Ser Thr Ala Leu Arg Glu Leu Ile Glu Glu Leu  
 1 5 10 15  
 Val Asn Ile Thr Gln Asn Gln Lys Ala Pro Leu Cys Asn Gly Ser Met  
 20 25 30  
 Val Trp Ser Ile Asn Leu Thr Ala Gly Met Tyr Cys Ala Ala Leu Glu  
 35 40 45  
 Ser Leu Ile Asn Val Ser Gly Cys Ser Ala Ile Glu Lys Thr Gln Arg  
 50 55 60  
 Met Leu Ser Gly Phe Cys Pro His Lys Val Ser Ala Gly Gln Phe Ser  
 65 70 75 80  
 Ser Leu His Val Arg Asp Thr Lys Ile Glu Val Ala Gln Phe Val Lys  
 85 90 95  
 Asp Leu Leu Leu His Leu Lys Lys Leu Phe Arg Glu Gly Arg Phe Asn  
 100 105 110

<210> 210  
 <211> 177  
 <212> PRT  
 <213> Homo sapiens  
 <300>  
 <308> Genbank CAA27168  
 <309> 1995-03-21

<400> 210  
 Thr Pro Leu Gly Pro Ala Ser Ser Leu Pro Gln Ser Phe Leu Leu Lys  
 1 5 10 15  
 Cys Leu Glu Gln Val Arg Lys Ile Gln Gly Asp Gly Ala Ala Leu Gln  
 20 25 30  
 Glu Lys Leu Val Ser Glu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu  
 35 40 45  
 Glu Leu Val Leu Leu Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu  
 50 55 60  
 Ser Ser Cys Pro Ser Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln  
 65 70 75 80  
 Leu His Ser Gly Leu Phe Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu  
 85 90 95  
 Gly Ile Ser Pro Glu Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp  
 100 105 110  
 Val Ala Asp Phe Ala Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly  
 115 120 125  
 Met Ala Pro Ala Leu Gln Pro Thr Gln Gly Ala Met Pro Ala Phe Ala

130  
 Ser Ala Phe Gln Arg Arg Ala Gly Gly Val Leu Val Ala Ser His Leu  
 145 150 155 160  
 Gln Ser Phe Leu Glu Val Ser Tyr Arg Val Leu Arg His Leu Ala Gln  
 165 170 175  
 Pro

<210> 211  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

<300>  
 <308> Genbank AAA60470  
 <309> 1995-01-13

<400> 211  
 Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys Thr Leu Ile Lys Thr  
 1 5 10 15  
 Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr Gln Ser Val Ser Ser  
 20 25 30  
 Lys Gln Lys Val Thr Gly Leu Asp Phe Ile Pro Gly Leu His Pro Ile  
 35 40 45  
 Leu Thr Leu Ser Lys Met Asp Gln Thr Leu Ala Val Tyr Gln Gln Ile  
 50 55 60  
 Leu Thr Ser Met Pro Ser Arg Asn Val Ile Gln Ile Ser Asn Asp Leu  
 65 70 75 80  
 Glu Asn Leu Arg Asp Leu Leu His Val Leu Ala Phe Ser Lys Ser Cys  
 85 90 95  
 His Leu Pro Trp Ala Ser Gly Leu Glu Thr Leu Asp Ser Leu Gly Gly  
 100 105 110  
 Val Leu Glu Ala Ser Gly Tyr Ser Thr Glu Val Val Ala Leu Ser Arg  
 115 120 125  
 Leu Gln Gly Ser Leu Gln Asp Met Leu Trp Gln Leu Asp Leu Ser Pro  
 130 135 140  
 Gly Cys  
 145

<210> 212  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<300>  
 <308> Genbank NP\_000605  
 <309> 2002-07-17

<400> 212  
 Met Ala Phe Thr Glu His Ser Pro Leu Thr Pro His Arg Arg Asp Leu  
 1 5 10 15  
 Cys Ser Arg Ser Ile Trp Leu Ala Arg Lys Ile Arg Ser Asp Leu Thr  
 20 25 30  
 Ala Leu Thr Glu Ser Tyr Val Lys His Gln Gly Leu Asn Lys Asn Ile  
 35 40 45  
 Asn Leu Asp Ser Ala Asp Gly Met Pro Val Ala Ser Thr Asp Gln Trp  
 50 55 60  
 Ser Glu Leu Thr Glu Ala Glu Arg Leu Gln Glu Asn Leu Gln Ala Tyr  
 65 70 75 80  
 Arg Thr Phe His Val Leu Leu Ala Arg Leu Leu Glu Asp Gln Gln Val  
 85 90 95  
 His Phe Thr Pro Thr Glu Gly Asp Phe His Gln Ala Ile His Thr Leu  
 100 105 110



Leu Leu Gln Val Ala Ala Phe Ala Tyr Gln Ile Glu Glu Leu Met Ile  
 115 120 125  
 Leu Leu Glu Tyr Lys Ile Pro Arg Asn Glu Ala Asp Gly Met Pro Ile  
 130 135 140  
 Asn Val Gly Asp Gly Gly Leu Phe Glu Lys Lys Leu Trp Gly Leu Lys  
 145 150 155 160  
 Val Leu Gln Glu Leu Ser Gln Trp Thr Val Arg Ser Ile His Asp Leu  
 165 170 175  
 Arg Phe Ile Ser Ser His Gln Thr Gly Ile Pro Ala Arg Gly Ser His  
 180 185 190  
 Tyr Ile Ala Asn Asn Lys Lys Met  
 195 200

<210> 213  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<300>  
 <308> Genbank CAA32147  
 <309> 1995-03-22

<400> 213  
 Ser Pro Leu Pro Ile Thr Pro Val Asn Ala Thr Cys Ala Ile Arg His  
 1 5 10 15  
 Pro Cys His Asn Asn Leu Met Asn Gln Ile Arg Ser Gln Leu Ala Gln  
 20 25 30  
 Leu Asn Gly Ser Ala Asn Ala Leu Phe Ile Leu Tyr Tyr Thr Ala Gln  
 35 40 45  
 Gly Glu Pro Phe Pro Asn Asn Leu Asp Lys Leu Cys Gly Pro Asn Val  
 50 55 60  
 Thr Asp Phe Pro Pro Phe His Ala Asn Gly Thr Glu Lys Ala Lys Leu  
 65 70 75 80  
 Val Glu Leu Tyr Arg Ile Val Val Tyr Leu Gly Thr Ser Leu Gly Asn  
 85 90 95  
 Ile Thr Arg Asp Gln Lys Ile Leu Asn Pro Ser Ala Leu Ser Leu His  
 100 105 110  
 Ser Lys Leu Asn Ala Thr Ala Asp Ile Leu Arg Gly Leu Leu Ser Asn  
 115 120 125  
 Val Leu Cys Arg Leu Cys Ser Lys Tyr His Val Gly His Val Asp Val  
 130 135 140  
 Thr Tyr Gly Pro Asp Thr Ser Gly Lys Asp Val Phe Gln Lys Lys Lys  
 145 150 155 160  
 Leu Gly Cys Gln Leu Leu Gly Lys Tyr Lys Gln Ile Ile Ala Val Leu  
 165 170 175  
 Ala Gln Ala Phe  
 180

<210> 214  
 <211> 227  
 <212> PRT  
 <213> Homo sapiens

<300>  
 <308> Genbank AAA36388  
 <309> 1993-04-27

<400> 214  
 Ala Ala Ile Gly Ser Cys Ser Lys Glu Tyr Arg Val Leu Leu Gly Gln  
 1 5 10 15  
 Leu Gln Lys Gln Thr Asp Leu Met Gln Asp Thr Ser Arg Leu Leu Asp  
 20 25 30  
 Pro Tyr Ile Arg Ile Gln Gly Leu Asp Val Pro Lys Leu Arg Glu His



<210> 216  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 216  
 Phe Pro Thr Ile Pro Leu Ser Arg Leu Phe Asp Asn Ala Met Leu Arg  
 1 5 10 15  
 Ala His Arg Leu His Gln Leu Ala Phe Asp Thr Tyr Gln Glu Phe Glu  
 20 25 30  
 Glu Ala Tyr Ile Pro Lys Glu Gln Lys Tyr Ser Phe Leu Gln Asn Pro  
 35 40 45  
 Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile Pro Thr Pro Ser Asn Arg  
 50 55 60  
 Glu Glu Thr Gln Gln Lys Ser Asn Leu Glu Leu Leu Arg Ile Ser Leu  
 65 70 75 80  
 Leu Leu Ile Gln Ser Trp Leu Glu Pro Val Gln Phe Leu Arg Ser Val  
 85 90 95  
 Phe Ala Asn Ser Leu Val Tyr Gly Ala Ser Asp Ser Asn Val Tyr Asp  
 100 105 110  
 Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln Thr Leu Met Gly Arg Leu  
 115 120 125  
 Glu Asp Gly Ser Pro Arg Thr Gly Gln Ile Phe Lys Gln Thr Tyr Ser  
 130 135 140  
 Lys Phe Asp Thr Asn Ser His Asn Asp Asp Ala Leu Leu Lys Asn Tyr  
 145 150 155 160  
 Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met Asp Lys Val Glu Thr Phe  
 165 170 175  
 Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe  
 180 185 190

<210> 217  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<300>  
 <308> Genbank AAD13886  
 <309> 1993-06-28

<400> 217  
 Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln  
 1 5 10 15  
 Pro Leu Thr Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu  
 20 25 30  
 Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met  
 35 40 45  
 Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro  
 50 55 60  
 Lys Met Ala Glu Lys Asp Gly Cys Phe Gln Ser Gly Phe Asn Glu Glu  
 65 70 75 80  
 Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr  
 85 90 95  
 Leu Glu Tyr Leu Gln Asn Arg Phe Glu Ser Ser Glu Glu Gln Ala Arg  
 100 105 110  
 Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys  
 115 120 125  
 Ala Lys Asn Leu Asp Ala Ile Thr Thr Pro Asp Pro Thr Thr Asn Ala  
 130 135 140  
 Ser Leu Leu Thr Lys Leu Gln Ala Gln Asn Gln Trp Leu Gln Asp Met  
 145 150 155 160  
 Thr Thr His Leu Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser  
 165 170 175

Leu Arg Ala Leu Arg Gln Met  
180

<210> 218  
<211> 55  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> EcoRI Forward Primer

<400> 218  
gcctgtatga tttattggat gttggaattc cctgatgcgg tattttctcc ttacg 55

<210> 219  
<211> 55  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> EcoRI Reverse Primer

<400> 219  
cgtaaggaga aaataccgca tcaggaatt ccaacatcca ataaatcata caggc 55

<210> 220  
<211> 35  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Seq ClaI Forward Primer

<400> 220  
ctgattatca accgcggtac atatgattga catgc 35

<210> 221  
<211> 31  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Seq ClaI Reverse Primer

<400> 221  
tacgggataa taccgcgcca catagcagaa c 31

<210> 222  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Seq Forward Primer

<400> 222  
cctgatgaag gaggactc 18

<210> 223  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
 <223> Seq Reverse Primer  
  
 <400> 223  
 ccaagcagca gatgagtc 18  
  
 <210> 224  
 <211> 31  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> IFN alpha-2b 5' Primer  
  
 <400> 224  
 tcagctgcaa gtcaagctgc tctgtgggct g 31  
  
 <210> 225  
 <211> 48  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> IFN alpha-2b 3' Primer  
  
 <400> 225  
 gctctagatc attccttact tcttaaactt tcttgcaagt ttgttgac 48  
  
 <210> 226  
 <211> 36  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> IFN alpha-2b HindIII Primer  
  
 <400> 226  
 cccaagctta tggccttgac ctttgcttta ctgggtg 36  
  
 <210> 227  
 <211> 48  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> IFN alpha-2b XbaI Primer  
  
 <400> 227  
 gctctagatc attccttact tcttaaactt tcttgcaagt ttgttgac 48  
  
 <210> 228  
 <211> 80  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> IFN alpha-2b 80 bp 5' Primer  
  
 <400> 228  
 cccaagctta tggccttgac ctttgcttta ctgggtggccc tctgtgtgct cagctgcaag 60  
 tcaagctgct ctgtgggctg 80  
  
 <210> 229

<211> 20  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> EMCV Forward Primer

<400> 229  
 cccctacatt gagcatcca 20

<210> 230  
 <211> 21  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> EMCV Reverse Primer

<400> 230  
 caggagcagg acaaggcac t 21

<210> 231  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <221> misc\_feature  
 <222> 1; 22  
 <223> EMCV Probe:  
 n at position 1 is  
 a 5-carboxyfluorescein(FAM)  
 -modified deoxycytidylate;  
 n at position 22 is an  
 N,N,N',N'-tetramethyl  
 -6-carboxyrhodamine  
 (TAMRA)-modified  
 deoxythymidylate.

<400> 231  
 nagccgtca agacccaacc gcn 22

<210> 232  
 <211> 165  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Interferon alpha consensus sequence

<400> 232  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Asn Arg Arg Ala Leu Ile  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Pro Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Pro Gln Glu Glu Phe Asp Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Gln Ala Ile Ser Val Leu His Glu Met Ile Gln Gln Thr Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Ser Leu  
 65 70 75 80  
 Leu Glu Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
 85 90 95

Ala	Cys	Val	Ile	Gln	Glu	Val	Gly	Val	Glu	Glu	Thr	Pro	Leu	Met	Asn
			100					105					110		
Val	Asp	Ser	Ile	Leu	Ala	Val	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu	
		115					120			125					
Tyr	Leu	Thr	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
		130				135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Arg
145					150					155					160
Leu	Arg	Arg	Lys	Glu											
				165											

<210> 233  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 233															
Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
		20						25					30		
Lys	Asp	Arg	Met	Asn	Phe	Gln	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35				40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
		50				55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
		130				135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
				165											

<210> 234  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 234															
Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
		20						25					30		
Lys	Asp	Arg	Met	Asn	Phe	Gln	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35				40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
		50				55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr

130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 235  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 235  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe His Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 236  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 236  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Gly Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165



<210> 237  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 237

Met	Ser	Tyr	Asn	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln	
1			5				10					15			
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20				25					30			
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Gln	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50				55				60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
						70				75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
						85				90					95
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
						100			105				110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
							120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
						130						140			
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
						145				155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
						165									

<210> 238  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 238

Met	Ser	Tyr	Asn	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln	
1			5				10					15			
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20				25					30			
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	His	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50				55				60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
						70				75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
						85				90					95
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
						100			105				110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
							120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
						130						140			
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
						145				155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
						165									

<210> 239  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 239

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1			5						10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Gln	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50			55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75					80	
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
			115				120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130			135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145				150					155						160
Thr	Gly	Tyr	Leu	Arg	Asn										
				165											

<210> 240

<211> 166

<212> PRT

<213> Homo sapiens

<400> 240

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1			5						10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Thr	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50			55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75					80	
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
			115				120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130			135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145				150					155						160
Thr	Gly	Tyr	Leu	Arg	Asn										
				165											

<210> 241

<211> 166

<212> PRT

<213> Homo sapiens

<400> 241

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1			5						10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu

	20		25		30										
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Ser	Gln	Leu	Gln
	35					40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50				55						60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75					80	
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
		100						105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
	115						120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130				135						140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145				150						155				160	
Thr	Gly	Tyr	Leu	Arg	Asn										
				165											

<210> 242  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

	<400>	242													
Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1		5						10					15		
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
	20						25					30			
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	His	Gln	Leu	Gln
	35					40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50				55						60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75					80	
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
		100						105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
	115						120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130				135						140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145				150						155				160	
Thr	Gly	Tyr	Leu	Arg	Asn										
				165											

<210> 243  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

	<400>	243													
Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1		5						10					15		
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
	20						25					30			
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Val	Gln
	35					40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50				55						60				

Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145				150						155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
				165											

<210> 244  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 244															
Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Ile	Gln
	35					40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln	
	50				55					60					
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65				70						75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145				150						155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
				165											

<210> 245  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 245															
Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Thr	Gln
	35					40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln	
	50				55					60					
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65				70						75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr

			100					105					110				
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg		
		115						120					125				
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr		
		130				135					140						
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu		
145					150					155					160		
Thr	Gly	Tyr	Leu	Arg	Asn												
				165													

<210> 246  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln		
1				5					10					15			
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu		
		20						25					30				
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Gln	Gln		
		35				40						45					
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln		
	50					55					60						
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn		
65				70					75					80			
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn		
			85						90					95			
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr		
			100					105					110				
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg		
		115				120						125					
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr		
	130					135					140						
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu		
145					150					155					160		
Thr	Gly	Tyr	Leu	Arg	Asn												
				165													

<210> 247  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln		
1				5					10					15			
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu		
		20						25					30				
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	His	Gln		
		35				40						45					
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln		
	50					55					60						
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn		
65				70					75					80			
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn		
			85						90					95			
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr		
			100					105					110				
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg		
		115				120						125					
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr		
	130					135					140						

Ile Val Arg Val Glu Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 248  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 248  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Ala Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 249  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 249  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Gln Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 250  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 250  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Thr Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 251  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 251  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Ser Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 252  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 252  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln His Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 253  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 253  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Ile Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 254  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 254  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30



Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
                   35                  40                  45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
                   50                  55                  60  
 Asn Ile Val Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
                   65                  70                  75                  80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
                                   85                  90                  95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
                                   100                  105                  110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
                   115                  120                  125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
                   130                  135                  140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
                   145                  150                  155                  160  
 Thr Gly Tyr Leu Arg Asn  
                                   165

<210> 255  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 255  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
   1                  5                  10                  15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
                   20                  25                  30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
                   35                  40                  45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
                   50                  55                  60  
 Asn Ile Phe Ala Ile Phe His Gln Asp Ser Ser Ser Thr Gly Trp Asn  
                   65                  70                  75                  80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
                                   85                  90                  95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
                                   100                  105                  110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
                   115                  120                  125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
                   130                  135                  140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
                   145                  150                  155                  160  
 Thr Gly Tyr Leu Arg Asn  
                                   165

<210> 256  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 256  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
   1                  5                  10                  15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
                   20                  25                  30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
                   35                  40                  45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
                   50                  55                  60  
 Asn Ile Phe Ala Ile Phe Gln Gln Asp Ser Ser Ser Thr Gly Trp Asn

65 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
                     85                    90                    95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
                     100                    105                    110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
                     115                    120                    125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
                     130                    135                    140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145                    150                    155                    160  
 Thr Gly Tyr Leu Arg Asn  
                     165

<210> 257  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 257  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1                    5                    10                    15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
                     20                    25                    30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
                     35                    40                    45  
 Gln Phe Gln Lys Glu Asp Ala Leu Thr Ile Tyr Glu Met Leu Gln  
                     50                    55                    60  
 Asn Ile Phe Ala Ile Phe Arg Gln Gln Ser Ser Ser Thr Gly Trp Asn  
 65                    70                    75                    80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
                     85                    90                    95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
                     100                    105                    110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
                     115                    120                    125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
                     130                    135                    140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145                    150                    155                    160  
 Thr Gly Tyr Leu Arg Asn  
                     165

<210> 258  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 258  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1                    5                    10                    15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
                     20                    25                    30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
                     35                    40                    45  
 Gln Phe Gln Lys Glu Asp Ala Leu Thr Ile Tyr Glu Met Leu Gln  
                     50                    55                    60  
 Asn Ile Phe Ala Ile Phe Arg Gln His Ser Ser Ser Thr Gly Trp Asn  
 65                    70                    75                    80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
                     85                    90                    95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
                     100                    105                    110

Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 259  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 259  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Gly Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 260  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 260  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Gln Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu

145  
 Thr Gly Tyr Leu Arg Asn  
 165

155

160

<210> 261  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 261  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 His Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 262  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 262  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Gln Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 263

<211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 263  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu His Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 264  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 264  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Gln Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 265  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 265

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Thr Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 266  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 266  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Ser Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 267  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 267  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln

35	40	45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln		
50	55	60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn		
65	70	75
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn		80
85	90	95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu His Glu Asp Phe Thr		
100	105	110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg		
115	120	125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr		
130	135	140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu		
145	150	155
Thr Gly Tyr Leu Arg Asn		160
165		

<210> 268  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 268
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
1 5 10 15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
20 25 30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
35 40 45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
50 55 60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
65 70 75 80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
85 90 95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Gln Asp Phe Thr
100 105 110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
115 120 125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
130 135 140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
145 150 155 160
Thr Gly Tyr Leu Arg Asn
165

<210> 269  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 269
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
1 5 10 15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
20 25 30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
35 40 45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
50 55 60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
65 70 75 80

Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	His	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120						125		
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 270  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
	35					40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln	
	50					55				60					
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Gln	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120						125		
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 271  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
	35					40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln	
	50					55				60					
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	His	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg



115		120		125
Ile Leu His Tyr Leu Lys	Ala Lys Glu Tyr Ser His	Cys Ala Trp Thr		
130	135	140		
Ile Val Arg Val Glu Ile	Leu Arg Asn Phe Tyr Phe	Ile Asn Arg Leu		
145	150	155	160	
Thr Gly Tyr Leu Arg Asn				
	165			

<210> 272  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 272

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln				
1	5	10	15	
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu				
20	25	30		
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln				
35	40	45		
Gln Phe Gln Lys Glu Asp Ala Leu Thr Ile Tyr Glu Met Leu Gln				
50	55	60		
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn				
65	70	75	80	
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn				
85	90	95		
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Gly Phe Thr				
100	105	110		
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg				
115	120	125		
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr				
130	135	140		
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu				
145	150	155	160	
Thr Gly Tyr Leu Arg Asn				
	165			

<210> 273  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 273

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln				
1	5	10	15	
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu				
20	25	30		
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln				
35	40	45		
Gln Phe Gln Lys Glu Asp Ala Leu Thr Ile Tyr Glu Met Leu Gln				
50	55	60		
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn				
65	70	75	80	
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn				
85	90	95		
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Ile Thr				
100	105	110		
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg				
115	120	125		
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr				
130	135	140		
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu				
145	150	155	160	

Thr Gly Tyr Leu Arg Asn  
165

<210> 274  
<211> 166  
<212> PRT  
<213> Homo sapiens

<400> 274  
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
1 5 10 15  
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
20 25 30  
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
35 40 45  
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
50 55 60  
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
65 70 75 80  
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
85 90 95  
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Val Thr  
100 105 110  
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
115 120 125  
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
130 135 140  
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
145 150 155 160  
Thr Gly Tyr Leu Arg Asn  
165

<210> 275  
<211> 166  
<212> PRT  
<213> Homo sapiens

<400> 275  
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
1 5 10 15  
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
20 25 30  
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
35 40 45  
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
50 55 60  
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
65 70 75 80  
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
85 90 95  
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
100 105 110  
His Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
115 120 125  
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
130 135 140  
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
145 150 155 160  
Thr Gly Tyr Leu Arg Asn  
165

<210> 276  
<211> 166

<212> PRT  
<213> Homo sapiens

<400> 276

```
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
 1          5          10          15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
      20          25          30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
      35          40          45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
      50          55          60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
      65          70          75          80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
      85          90          95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
      100          105          110
Gln Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
      115          120          125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
      130          135          140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
      145          150          155          160
Thr Gly Tyr Leu Arg Asn
      165
```

<210> 277

<211> 166

<212> PRT

<213> Homo sapiens

<400> 277

```
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
 1          5          10          15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
      20          25          30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
      35          40          45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
      50          55          60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
      65          70          75          80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
      85          90          95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
      100          105          110
Arg Gly Lys Val Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
      115          120          125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
      130          135          140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
      145          150          155          160
Thr Gly Tyr Leu Arg Asn
      165
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<210> 278

<211> 166

<212> PRT

<213> Homo sapiens

<400> 278

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln

1	5	10	15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu			
20	25	30	
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln			
35	40	45	
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln			
50	55	60	
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn			
65	70	75	80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn			
85	90	95	
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr			
100	105	110	
Arg Gly Lys Ile Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg			
115	120	125	
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr			
130	135	140	
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu			
145	150	155	160
Thr Gly Tyr Leu Arg Asn			
165			

<210> 279  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 279
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
1 5 10 15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
20 25 30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
35 40 45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
50 55 60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
65 70 75 80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
85 90 95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
100 105 110
Arg Gly Lys Thr Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
115 120 125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
130 135 140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
145 150 155 160
Thr Gly Tyr Leu Arg Asn
165

<210> 280  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 280
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
1 5 10 15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
20 25 30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
35 40 45

Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
50						55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Gln	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
				165											

<210> 281  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
		20						25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
	35					40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50					55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	His	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
				165											

<210> 282  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
		20						25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
	35					40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50					55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn



Ile Leu His Tyr Leu Dps Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 285  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 285  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Thr His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 286  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 286  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Gln His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn

<210> 287  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 287  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser His His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 288  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 288  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Ala His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 289  
 <211> 166  
 <212> PRT



<213> Homo sapiens

<400> 289

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35					40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50					55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75					80	
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
		100						105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Gln	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 290

<211> 146

<212> PRT

<213> Homo sapiens

<400> 290

Cys	Tyr	Cys	Gln	Asp	Pro	Tyr	Val	Lys	Glu	Ala	Glu	Asn	Leu	Lys	Lys
1				5					10					15	
Tyr	Phe	Asn	Ala	Gly	His	Ser	Asp	Val	Ala	Asp	Asn	Gly	Thr	Leu	Phe
			20					25					30		
Val	Gly	Ile	Leu	Lys	Asn	Trp	Lys	Glu	Glu	Ser	Asp	Arg	Lys	Ile	Met
	35						40					45			
Gln	Ser	Gln	Ile	Val	Ser	Phe	Tyr	Phe	Lys	Leu	Phe	Lys	Asn	Phe	Lys
	50					55					60				
Asp	Asp	Gln	Ser	Ile	Gln	Lys	Ser	Val	Glu	Thr	Ile	Lys	Glu	Asp	Met
65					70					75				80	
Asn	Val	Lys	Phe	Phe	Asn	Ser	Asn	Lys	Lys	Lys	Arg	Asp	Asp	Phe	Glu
			85						90					95	
Lys	Leu	Thr	Asn	Tyr	Ser	Val	Thr	Asp	Leu	Asn	Val	Gln	Arg	Lys	Ala
		100						105					110		
Ile	His	Glu	Leu	Ile	Gln	Val	Met	Ala	Glu	Leu	Ser	Pro	Ala	Ala	Lys
	115						120					125			
Thr	Gly	Lys	Arg	Lys	Arg	Ser	Gln	Met	Leu	Phe	Gln	Gly	Arg	Arg	Ala
	130					135					140				
Ser	Gln														
145															

<210> 291

<211> 146

<212> PRT

<213> Homo sapiens

<400> 291

Cys	Tyr	Cys	Gln	Asp	Pro	Tyr	Val	Lys	Glu	Ala	Glu	Asn	Leu	Lys	Lys
1				5					10					15	
Tyr	Phe	Asn	Ala	Gly	His	Ser	Asp	Val	Ala	Asp	Asn	Gly	Thr	Leu	Phe





130  
Ser Gln  
145

135

140

<210> 296  
<211> 146  
<212> PRT  
<213> Homo sapiens

<400> 296  
Cys Tyr Cys Gln Asp Pro Tyr Val Lys Glu Ala Glu Asn Leu Lys Lys  
1 5 10 15  
Tyr Phe Asn Ala Gly His Ser Asp Val Ala Asp Asn Gly Thr Leu Phe  
20 25 30  
Leu Gly Ile Leu Lys Asn Trp Lys Gln Glu Ser Asp Arg Lys Ile Met  
35 40 45  
Gln Ser Gln Ile Val Ser Phe Tyr Phe Lys Leu Phe Lys Asn Phe Lys  
50 55 60  
Asp Asp Gln Ser Ile Gln Lys Ser Val Glu Thr Ile Lys Glu Asp Met  
65 70 75 80  
Asn Val Lys Phe Phe Asn Ser Asn Lys Lys Lys Arg Asp Asp Phe Glu  
85 90 95  
Lys Leu Thr Asn Tyr Ser Val Thr Asp Leu Asn Val Gln Arg Lys Ala  
100 105 110  
Ile His Glu Leu Ile Gln Val Met Ala Glu Leu Ser Pro Ala Ala Lys  
115 120 125  
Thr Gly Lys Arg Lys Arg Ser Gln Met Leu Phe Gln Gly Arg Arg Ala  
130 135 140  
Ser Gln  
145

<210> 297  
<211> 146  
<212> PRT  
<213> Homo sapiens

<400> 297  
Cys Tyr Cys Gln Asp Pro Tyr Val Lys Glu Ala Glu Asn Leu Lys Lys  
1 5 10 15  
Tyr Phe Asn Ala Gly His Ser Asp Val Ala Asp Asn Gly Thr Leu Phe  
20 25 30  
Leu Gly Ile Leu Lys Asn Trp Lys Asn Glu Ser Asp Arg Lys Ile Met  
35 40 45  
Gln Ser Gln Ile Val Ser Phe Tyr Phe Lys Leu Phe Lys Asn Phe Lys  
50 55 60  
Asp Asp Gln Ser Ile Gln Lys Ser Val Glu Thr Ile Lys Glu Asp Met  
65 70 75 80  
Asn Val Lys Phe Phe Asn Ser Asn Lys Lys Lys Arg Asp Asp Phe Glu  
85 90 95  
Lys Leu Thr Asn Tyr Ser Val Thr Asp Leu Asn Val Gln Arg Lys Ala  
100 105 110  
Ile His Glu Leu Ile Gln Val Met Ala Glu Leu Ser Pro Ala Ala Lys  
115 120 125  
Thr Gly Lys Arg Lys Arg Ser Gln Met Leu Phe Gln Gly Arg Arg Ala  
130 135 140  
Ser Gln  
145

<210> 298  
<211> 146

<212> PRT  
<213> Homo sapiens

<400> 298

Cys	Tyr	Cys	Gln	Asp	Pro	Tyr	Val	Lys	Glu	Ala	Glu	Asn	Leu	Lys	Lys
1				5					10					15	
Tyr	Phe	Asn	Ala	Gly	His	Ser	Asp	Val	Ala	Asp	Asn	Gly	Thr	Leu	Phe
			20					25					30		
Leu	Gly	Ile	Leu	Lys	Asn	Trp	Lys	His	Glu	Ser	Asp	Arg	Lys	Ile	Met
		35					40					45			
Gln	Ser	Gln	Ile	Val	Ser	Phe	Tyr	Phe	Lys	Leu	Phe	Lys	Asn	Phe	Lys
		50				55					60				
Asp	Asp	Gln	Ser	Ile	Gln	Lys	Ser	Val	Glu	Thr	Ile	Lys	Glu	Asp	Met
65					70					75				80	
Asn	Val	Lys	Phe	Phe	Asn	Ser	Asn	Lys	Lys	Lys	Arg	Asp	Asp	Phe	Glu
				85					90					95	
Lys	Leu	Thr	Asn	Tyr	Ser	Val	Thr	Asp	Leu	Asn	Val	Gln	Arg	Lys	Ala
			100					105					110		
Ile	His	Glu	Leu	Ile	Gln	Val	Met	Ala	Glu	Leu	Ser	Pro	Ala	Ala	Lys
		115					120					125			
Thr	Gly	Lys	Arg	Lys	Arg	Ser	Gln	Met	Leu	Phe	Gln	Gly	Arg	Arg	Ala
		130				135						140			
Ser	Gln														
145															

<210> 299

<211> 146

<212> PRT

<213> Homo sapiens

<400> 299

Cys	Tyr	Cys	Gln	Asp	Pro	Tyr	Val	Lys	Glu	Ala	Glu	Asn	Leu	Lys	Lys
1				5					10					15	
Tyr	Phe	Asn	Ala	Gly	His	Ser	Asp	Val	Ala	Asp	Asn	Gly	Thr	Leu	Phe
			20					25					30		
Leu	Gly	Ile	Leu	Lys	Asn	Trp	Lys	Glu	Gln	Ser	Asp	Arg	Lys	Ile	Met
		35					40					45			
Gln	Ser	Gln	Ile	Val	Ser	Phe	Tyr	Phe	Lys	Leu	Phe	Lys	Asn	Phe	Lys
		50				55					60				
Asp	Asp	Gln	Ser	Ile	Gln	Lys	Ser	Val	Glu	Thr	Ile	Lys	Glu	Asp	Met
65					70					75				80	
Asn	Val	Lys	Phe	Phe	Asn	Ser	Asn	Lys	Lys	Lys	Arg	Asp	Asp	Phe	Glu
				85					90					95	
Lys	Leu	Thr	Asn	Tyr	Ser	Val	Thr	Asp	Leu	Asn	Val	Gln	Arg	Lys	Ala
			100					105					110		
Ile	His	Glu	Leu	Ile	Gln	Val	Met	Ala	Glu	Leu	Ser	Pro	Ala	Ala	Lys
		115					120					125			
Thr	Gly	Lys	Arg	Lys	Arg	Ser	Gln	Met	Leu	Phe	Gln	Gly	Arg	Arg	Ala
		130				135						140			
Ser	Gln														
145															

<210> 300

<211> 146

<212> PRT

<213> Homo sapiens

<400> 300

Cys	Tyr	Cys	Gln	Asp	Pro	Tyr	Val	Lys	Glu	Ala	Glu	Asn	Leu	Lys	Lys
1				5					10					15	
Tyr	Phe	Asn	Ala	Gly	His	Ser	Asp	Val	Ala	Asp	Asn	Gly	Thr	Leu	Phe

20	25	30
Leu Gly Ile	Leu Lys Asn Trp Lys Glu Asn Ser Asp Arg Lys Ile Met	
35	40	45
Gln Ser Gln Ile Val Ser Phe Tyr Phe Lys Leu Phe Lys Asn Phe Lys		
50	55	60
Asp Asp Gln Ser Ile Gln Lys Ser Val Glu Thr Ile Lys Glu Asp Met		
65	70	75
Asn Val Lys Phe Phe Asn Ser Asn Lys Lys Lys Arg Asp Asp Phe Glu		
85	90	95
Lys Leu Thr Asn Tyr Ser Val Thr Asp Leu Asn Val Gln Arg Lys Ala		
100	105	110
Ile His Glu Leu Ile Gln Val Met Ala Glu Leu Ser Pro Ala Ala Lys		
115	120	125
Thr Gly Lys Arg Lys Arg Ser Gln Met Leu Phe Gln Gly Arg Arg Ala		
130	135	140
Ser Gln		
145		

<210> 301  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

<400> 301
Cys Tyr Cys Gln Asp Pro Tyr Val Lys Glu Ala Glu Asn Leu Lys Lys
1 5 10 15
Tyr Phe Asn Ala Gly His Ser Asp Val Ala Asp Asn Gly Thr Leu Phe
20 25 30
Leu Gly Ile Leu Lys Asn Trp Lys Glu His Ser Asp Arg Lys Ile Met
35 40 45
Gln Ser Gln Ile Val Ser Phe Tyr Phe Lys Leu Phe Lys Asn Phe Lys
50 55 60
Asp Asp Gln Ser Ile Gln Lys Ser Val Glu Thr Ile Lys Glu Asp Met
65 70 75 80
Asn Val Lys Phe Phe Asn Ser Asn Lys Lys Lys Arg Asp Asp Phe Glu
85 90 95
Lys Leu Thr Asn Tyr Ser Val Thr Asp Leu Asn Val Gln Arg Lys Ala
100 105 110
Ile His Glu Leu Ile Gln Val Met Ala Glu Leu Ser Pro Ala Ala Lys
115 120 125
Thr Gly Lys Arg Lys Arg Ser Gln Met Leu Phe Gln Gly Arg Arg Ala
130 135 140
Ser Gln
145

<210> 302  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

<400> 302
Cys Tyr Cys Gln Asp Pro Tyr Val Lys Glu Ala Glu Asn Leu Lys Lys
1 5 10 15
Tyr Phe Asn Ala Gly His Ser Asp Val Ala Asp Asn Gly Thr Leu Phe
20 25 30
Leu Gly Ile Leu Lys Asn Trp Lys Glu Glu Ser Asp Arg Lys Ile Met
35 40 45
Gln Ser Gln Ile Val Ser Phe Tyr Phe Gln Leu Phe Lys Asn Phe Lys
50 55 60
Asp Asp Gln Ser Ile Gln Lys Ser Val Glu Thr Ile Lys Glu Asp Met
65 70 75 80

Asn Val Lys Phe Phe Asn Ser Asn Lys Lys Lys Arg Asp Asp Phe Glu  
 85 90 95  
 Lys Leu Thr Asn Tyr Ser Val Thr Asp Leu Asn Val Gln Arg Lys Ala  
 100 105 110  
 Ile His Glu Leu Ile Gln Val Met Ala Glu Leu Ser Pro Ala Ala Lys  
 115 120 125  
 Thr Gly Lys Arg Lys Arg Ser Gln Met Leu Phe Gln Gly Arg Arg Ala  
 130 135 140  
 Ser Gln  
 145

<210> 303  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

<400> 303  
 Cys Tyr Cys Gln Asp Pro Tyr Val Lys Glu Ala Glu Asn Leu Lys Lys  
 1 5 10 15  
 Tyr Phe Asn Ala Gly His Ser Asp Val Ala Asp Asn Gly Thr Leu Phe  
 20 25 30  
 Leu Gly Ile Leu Lys Asn Trp Lys Glu Glu Ser Asp Arg Lys Ile Met  
 35 40 45  
 Gln Ser Gln Ile Val Ser Phe Tyr Phe Asn Leu Phe Lys Asn Phe Lys  
 50 55 60  
 Asp Asp Gln Ser Ile Gln Lys Ser Val Glu Thr Ile Lys Glu Asp Met  
 65 70 75 80  
 Asn Val Lys Phe Phe Asn Ser Asn Lys Lys Lys Arg Asp Asp Phe Glu  
 85 90 95  
 Lys Leu Thr Asn Tyr Ser Val Thr Asp Leu Asn Val Gln Arg Lys Ala  
 100 105 110  
 Ile His Glu Leu Ile Gln Val Met Ala Glu Leu Ser Pro Ala Ala Lys  
 115 120 125  
 Thr Gly Lys Arg Lys Arg Ser Gln Met Leu Phe Gln Gly Arg Arg Ala  
 130 135 140  
 Ser Gln  
 145

<210> 304  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

<400> 304  
 Cys Tyr Cys Gln Asp Pro Tyr Val Lys Glu Ala Glu Asn Leu Lys Lys  
 1 5 10 15  
 Tyr Phe Asn Ala Gly His Ser Asp Val Ala Asp Asn Gly Thr Leu Phe  
 20 25 30  
 Leu Gly Ile Leu Lys Asn Trp Lys Glu Glu Ser Asp Arg Lys Ile Met  
 35 40 45  
 Gln Ser Gln Ile Val Ser Phe Tyr Phe Lys Leu Phe Gln Asn Phe Lys  
 50 55 60  
 Asp Asp Gln Ser Ile Gln Lys Ser Val Glu Thr Ile Lys Glu Asp Met  
 65 70 75 80  
 Asn Val Lys Phe Phe Asn Ser Asn Lys Lys Lys Arg Asp Asp Phe Glu  
 85 90 95  
 Lys Leu Thr Asn Tyr Ser Val Thr Asp Leu Asn Val Gln Arg Lys Ala  
 100 105 110  
 Ile His Glu Leu Ile Gln Val Met Ala Glu Leu Ser Pro Ala Ala Lys  
 115 120 125  
 Thr Gly Lys Arg Lys Arg Ser Gln Met Leu Phe Gln Gly Arg Arg Ala

130  
Ser Gln  
145

135

140

<210> 305  
<211> 146  
<212> PRT  
<213> Homo sapiens

<400> 305  
Cys Tyr Cys Gln Asp Pro Tyr Val Lys Glu Ala Glu Asn Leu Lys Lys  
1 5 10 15  
Tyr Phe Asn Ala Gly His Ser Asp Val Ala Asp Asn Gly Thr Leu Phe  
20 25 30  
Leu Gly Ile Leu Lys Asn Trp Lys Glu Glu Ser Asp Arg Lys Ile Met  
35 40 45  
Gln Ser Gln Ile Val Ser Phe Tyr Phe Lys Leu Phe Asn Asn Phe Lys  
50 55 60  
Asp Asp Gln Ser Ile Gln Lys Ser Val Glu Thr Ile Lys Glu Asp Met  
65 70 75 80  
Asn Val Lys Phe Phe Asn Ser Asn Lys Lys Lys Arg Asp Asp Phe Glu  
85 90 95  
Lys Leu Thr Asn Tyr Ser Val Thr Asp Leu Asn Val Gln Arg Lys Ala  
100 105 110  
Ile His Glu Leu Ile Gln Val Met Ala Glu Leu Ser Pro Ala Ala Lys  
115 120 125  
Thr Gly Lys Arg Lys Arg Ser Gln Met Leu Phe Gln Gly Arg Arg Ala  
130 135 140  
Ser Gln  
145

<210> 306  
<211> 146  
<212> PRT  
<213> Homo sapiens

<400> 306  
Cys Tyr Cys Gln Asp Pro Tyr Val Lys Glu Ala Glu Asn Leu Lys Lys  
1 5 10 15  
Tyr Phe Asn Ala Gly His Ser Asp Val Ala Asp Asn Gly Thr Leu Phe  
20 25 30  
Leu Gly Ile Leu Lys Asn Trp Lys Glu Glu Ser Asp Arg Lys Ile Met  
35 40 45  
Gln Ser Gln Ile Val Ser Phe Tyr Phe Lys Leu Phe Lys Asn Phe Gln  
50 55 60  
Asp Asp Gln Ser Ile Gln Lys Ser Val Glu Thr Ile Lys Glu Asp Met  
65 70 75 80  
Asn Val Lys Phe Phe Asn Ser Asn Lys Lys Lys Arg Asp Asp Phe Glu  
85 90 95  
Lys Leu Thr Asn Tyr Ser Val Thr Asp Leu Asn Val Gln Arg Lys Ala  
100 105 110  
Ile His Glu Leu Ile Gln Val Met Ala Glu Leu Ser Pro Ala Ala Lys  
115 120 125  
Thr Gly Lys Arg Lys Arg Ser Gln Met Leu Phe Gln Gly Arg Arg Ala  
130 135 140  
Ser Gln  
145

<210> 307  
<211> 146



<212> PRT  
<213> Homo sapiens

<400> 307

Cys	Tyr	Cys	Gln	Asp	Pro	Tyr	Val	Lys	Glu	Ala	Glu	Asn	Leu	Lys	Lys
1				5					10					15	
Tyr	Phe	Asn	Ala	Gly	His	Ser	Asp	Val	Ala	Asp	Asn	Gly	Thr	Leu	Phe
		20						25					30		
Leu	Gly	Ile	Leu	Lys	Asn	Trp	Lys	Glu	Glu	Ser	Asp	Arg	Lys	Ile	Met
	35						40					45			
Gln	Ser	Gln	Ile	Val	Ser	Phe	Tyr	Phe	Lys	Leu	Phe	Lys	Asn	Phe	Asn
	50					55					60				
Asp	Asp	Gln	Ser	Ile	Gln	Lys	Ser	Val	Glu	Thr	Ile	Lys	Glu	Asp	Met
65					70					75				80	
Asn	Val	Lys	Phe	Phe	Asn	Ser	Asn	Lys	Lys	Lys	Arg	Asp	Asp	Phe	Glu
			85						90					95	
Lys	Leu	Thr	Asn	Tyr	Ser	Val	Thr	Asp	Leu	Asn	Val	Gln	Arg	Lys	Ala
			100					105					110		
Ile	His	Glu	Leu	Ile	Gln	Val	Met	Ala	Glu	Leu	Ser	Pro	Ala	Ala	Lys
	115						120					125			
Thr	Gly	Lys	Arg	Lys	Arg	Ser	Gln	Met	Leu	Phe	Gln	Gly	Arg	Arg	Ala
	130					135					140				
Ser	Gln														
145															

<210> 308  
<211> 146  
<212> PRT  
<213> Homo sapiens

<400> 308

Cys	Tyr	Cys	Gln	Asp	Pro	Tyr	Val	Lys	Glu	Ala	Glu	Asn	Leu	Lys	Lys
1				5					10					15	
Tyr	Phe	Asn	Ala	Gly	His	Ser	Asp	Val	Ala	Asp	Asn	Gly	Thr	Leu	Phe
		20						25					30		
Leu	Gly	Ile	Leu	Lys	Asn	Trp	Lys	Glu	Glu	Ser	Asp	Arg	Lys	Ile	Met
	35						40					45			
Gln	Ser	Gln	Ile	Val	Ser	Phe	Tyr	Phe	Lys	Leu	Phe	Lys	Asn	Phe	Lys
	50					55					60				
Gln	Asp	Gln	Ser	Ile	Gln	Lys	Ser	Val	Glu	Thr	Ile	Lys	Glu	Asp	Met
65					70					75				80	
Asn	Val	Lys	Phe	Phe	Asn	Ser	Asn	Lys	Lys	Lys	Arg	Asp	Asp	Phe	Glu
			85						90					95	
Lys	Leu	Thr	Asn	Tyr	Ser	Val	Thr	Asp	Leu	Asn	Val	Gln	Arg	Lys	Ala
			100					105					110		
Ile	His	Glu	Leu	Ile	Gln	Val	Met	Ala	Glu	Leu	Ser	Pro	Ala	Ala	Lys
	115						120					125			
Thr	Gly	Lys	Arg	Lys	Arg	Ser	Gln	Met	Leu	Phe	Gln	Gly	Arg	Arg	Ala
	130					135					140				
Ser	Gln														
145															

<210> 309  
<211> 146  
<212> PRT  
<213> Homo sapiens

<400> 309

Cys	Tyr	Cys	Gln	Asp	Pro	Tyr	Val	Lys	Glu	Ala	Glu	Asn	Leu	Lys	Lys
1				5					10					15	
Tyr	Phe	Asn	Ala	Gly	His	Ser	Asp	Val	Ala	Asp	Asn	Gly	Thr	Leu	Phe

20 25 30  
 Leu Gly Ile Leu Lys Asn Trp Lys Glu Glu Ser Asp Arg Lys Ile Met  
 35 40 45  
 Gln Ser Gln Ile Val Ser Phe Tyr Phe Lys Leu Phe Lys Asn Phe Lys  
 50 55 60  
 Asn Asp Gln Ser Ile Gln Lys Ser Val Glu Thr Ile Lys Glu Asp Met  
 65 70 75 80  
 Asn Val Lys Phe Phe Asn Ser Asn Lys Lys Lys Arg Asp Asp Phe Glu  
 85 90 95  
 Lys Leu Thr Asn Tyr Ser Val Thr Asp Leu Asn Val Gln Arg Lys Ala  
 100 105 110  
 Ile His Glu Leu Ile Gln Val Met Ala Glu Leu Ser Pro Ala Ala Lys  
 115 120 125  
 Thr Gly Lys Arg Lys Arg Ser Gln Met Leu Phe Gln Gly Arg Arg Ala  
 130 135 140  
 Ser Gln  
 145

<210> 310  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

<400> 310  
 Cys Tyr Cys Gln Asp Pro Tyr Val Lys Glu Ala Glu Asn Leu Lys Lys  
 1 5 10 15  
 Tyr Phe Asn Ala Gly His Ser Asp Val Ala Asp Asn Gly Thr Leu Phe  
 20 25 30  
 Leu Gly Ile Leu Lys Asn Trp Lys Glu Glu Ser Asp Arg Lys Ile Met  
 35 40 45  
 Gln Ser Gln Ile Val Ser Phe Tyr Phe Lys Leu Phe Lys Asn Phe Lys  
 50 55 60  
 Asp Gln Gln Ser Ile Gln Lys Ser Val Glu Thr Ile Lys Glu Asp Met  
 65 70 75 80  
 Asn Val Lys Phe Phe Asn Ser Asn Lys Lys Lys Arg Asp Asp Phe Glu  
 85 90 95  
 Lys Leu Thr Asn Tyr Ser Val Thr Asp Leu Asn Val Gln Arg Lys Ala  
 100 105 110  
 Ile His Glu Leu Ile Gln Val Met Ala Glu Leu Ser Pro Ala Ala Lys  
 115 120 125  
 Thr Gly Lys Arg Lys Arg Ser Gln Met Leu Phe Gln Gly Arg Arg Ala  
 130 135 140  
 Ser Gln  
 145

<210> 311  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

<400> 311  
 Cys Tyr Cys Gln Asp Pro Tyr Val Lys Glu Ala Glu Asn Leu Lys Lys  
 1 5 10 15  
 Tyr Phe Asn Ala Gly His Ser Asp Val Ala Asp Asn Gly Thr Leu Phe  
 20 25 30  
 Leu Gly Ile Leu Lys Asn Trp Lys Glu Glu Ser Asp Arg Lys Ile Met  
 35 40 45  
 Gln Ser Gln Ile Val Ser Phe Tyr Phe Lys Leu Phe Lys Asn Phe Lys  
 50 55 60  
 Asp Asn Gln Ser Ile Gln Lys Ser Val Glu Thr Ile Lys Glu Asp Met  
 65 70 75 80

Asn Val Lys Phe Phe Asn Ser Asn Lys Lys Lys Arg Asp Asp Phe Glu  
 85 90 95  
 Lys Leu Thr Asn Tyr Ser Val Thr Asp Leu Asn Val Gln Arg Lys Ala  
 100 105 110  
 Ile His Glu Leu Ile Gln Val Met Ala Glu Leu Ser Pro Ala Ala Lys  
 115 120 125  
 Thr Gly Lys Arg Lys Arg Ser Gln Met Leu Phe Gln Gly Arg Arg Ala  
 130 135 140  
 Ser Gln  
 145

<210> 312  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 312  
 Ser Pro Gly Gln Gly Thr Gln Ser Glu Asn Ser Cys Thr His Phe Pro  
 1 5 10 15  
 Gly Asn Leu Pro Asn Met Leu Arg Asp Leu Arg Asp Ala Phe Ser Arg  
 20 25 30  
 Val Lys Thr Phe Phe Gln Met Lys Asp Gln Leu Asp Asn Leu Leu Leu  
 35 40 45  
 Gln Glu Ser Leu Leu Glu Asp Phe Lys Gly Tyr Leu Gly Cys Gln Ala  
 50 55 60  
 Leu Ser Glu Met Ile Gln Phe Tyr Leu Glu Glu Val Met Pro Gln Ala  
 65 70 75 80  
 Glu Asn Gln Asp Pro Asp Ile Lys Ala His Val Asn Ser Leu Gly Glu  
 85 90 95  
 Asn Leu Lys Thr Leu Arg Leu Arg Leu Arg Arg Cys His Arg Phe Leu  
 100 105 110  
 Pro Cys Glu Asn Lys Ser Lys Ala Val Glu Gln Val Lys Asn Ala Phe  
 115 120 125  
 Asn Lys Leu Gln Glu Lys Gly Ile Tyr Lys Ala Met Ser Glu Phe Asp  
 130 135 140  
 Ile Phe Ile Asn Tyr Ile Glu Ala Tyr Met Thr Met Lys Ile Arg Asn  
 145 150 155 160

<210> 313  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 313  
 Ser Pro Gly Gln Gly Thr Gln Ser Glu Asn Ser Cys Thr His Phe Pro  
 1 5 10 15  
 Gly Asn Leu Pro Asn Met Leu Arg Asp Leu Arg Asp Ala Phe Ser Arg  
 20 25 30  
 Val Lys Thr Phe Phe Gln Met Lys Asp Gln Leu Asp Asn Leu Leu Leu  
 35 40 45  
 Asn Glu Ser Leu Leu Glu Asp Phe Lys Gly Tyr Leu Gly Cys Gln Ala  
 50 55 60  
 Leu Ser Glu Met Ile Gln Phe Tyr Leu Glu Glu Val Met Pro Gln Ala  
 65 70 75 80  
 Glu Asn Gln Asp Pro Asp Ile Lys Ala His Val Asn Ser Leu Gly Glu  
 85 90 95  
 Asn Leu Lys Thr Leu Arg Leu Arg Leu Arg Arg Cys His Arg Phe Leu  
 100 105 110  
 Pro Cys Glu Asn Lys Ser Lys Ala Val Glu Gln Val Lys Asn Ala Phe  
 115 120 125  
 Asn Lys Leu Gln Glu Lys Gly Ile Tyr Lys Ala Met Ser Glu Phe Asp

130		135		140
Ile Phe Ile Asn Tyr	Ile Glu Ala Tyr Met	Thr Met Lys Ile Arg Asn		
145	150	155	160	

<210> 314  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 314

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1				5					10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
		20						25					30		
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
		35					40					45			
Lys	Gln	Ser	Leu	Leu	Glu	Asp	Phe	Lys	Gly	Tyr	Leu	Gly	Cys	Gln	Ala
		50				55					60				
Leu	Ser	Glu	Met	Ile	Gln	Phe	Tyr	Leu	Glu	Glu	Val	Met	Pro	Gln	Ala
65					70					75				80	
Glu	Asn	Gln	Asp	Pro	Asp	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
			85						90					95	
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
			100					105					110		
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
		115					120					125			
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp
		130				135					140				
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
145					150					155					160

<210> 315  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 315

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1				5					10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
		20						25					30		
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
		35					40					45			
Lys	Asn	Ser	Leu	Leu	Glu	Asp	Phe	Lys	Gly	Tyr	Leu	Gly	Cys	Gln	Ala
		50				55					60				
Leu	Ser	Glu	Met	Ile	Gln	Phe	Tyr	Leu	Glu	Glu	Val	Met	Pro	Gln	Ala
65					70					75				80	
Glu	Asn	Gln	Asp	Pro	Asp	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
			85						90					95	
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
			100					105					110		
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
		115					120					125			
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp
		130				135					140				
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
145					150					155					160

<210> 316  
 <211> 160

<212> PRT  
<213> Homo sapiens

<400> 316

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1				5					10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
			20					25					30		
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
		35					40					45			
Lys	His	Ser	Leu	Leu	Glu	Asp	Phe	Lys	Gly	Tyr	Leu	Gly	Cys	Gln	Ala
	50					55					60				
Leu	Ser	Glu	Met	Ile	Gln	Phe	Tyr	Leu	Glu	Glu	Val	Met	Pro	Gln	Ala
65					70					75				80	
Glu	Asn	Gln	Asp	Pro	Asp	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
			85						90					95	
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
			100					105					110		
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
	115						120					125			
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp
	130					135					140				
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
145					150					155					160

<210> 317

<211> 160

<212> PRT

<213> Homo sapiens

<400> 317

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1				5					10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
			20					25					30		
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
		35					40					45			
Lys	Glu	Ser	Val	Leu	Glu	Asp	Phe	Lys	Gly	Tyr	Leu	Gly	Cys	Gln	Ala
	50					55					60				
Leu	Ser	Glu	Met	Ile	Gln	Phe	Tyr	Leu	Glu	Glu	Val	Met	Pro	Gln	Ala
65					70					75				80	
Glu	Asn	Gln	Asp	Pro	Asp	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
			85						90					95	
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
			100					105					110		
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
	115						120					125			
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp
	130					135					140				
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
145					150					155					160

<210> 318

<211> 160

<212> PRT

<213> Homo sapiens

<400> 318

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1				5					10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg



Glu	Asn	Gln	Asp	Pro	85	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	95	Glu
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
145					150					155					160

<210> 321  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1				5					10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
Lys	Glu	Ser	Leu	Leu	Gln	Asp	Phe	Lys	Gly	Tyr	Leu	Gly	Cys	Gln	Ala
Leu	Ser	Glu	Met	Ile	Gln	Phe	Tyr	Leu	Glu	Glu	Val	Met	Pro	Gln	Ala
Glu	Asn	Gln	Asp	Pro	Asp	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
145					150					155					160

<210> 322  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1				5					10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
Lys	Glu	Ser	Leu	Leu	Asn	Asp	Phe	Lys	Gly	Tyr	Leu	Gly	Cys	Gln	Ala
Leu	Ser	Glu	Met	Ile	Gln	Phe	Tyr	Leu	Glu	Glu	Val	Met	Pro	Gln	Ala
Glu	Asn	Gln	Asp	Pro	Asp	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp

130		135		140
Ile Phe Ile Asn Tyr	Ile Glu Ala Tyr Met	Thr Met Lys Ile Arg Asn		
145	150	155	160	

<210> 323  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 323

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1				5					10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
		20						25					30		
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
		35					40					45			
Lys	Glu	Ser	Leu	Leu	His	Asp	Phe	Lys	Gly	Tyr	Leu	Gly	Cys	Gln	Ala
	50					55					60				
Leu	Ser	Glu	Met	Ile	Gln	Phe	Tyr	Leu	Glu	Glu	Val	Met	Pro	Gln	Ala
65					70					75				80	
Glu	Asn	Gln	Asp	Pro	Asp	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
			85						90					95	
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
			100					105					110		
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
		115					120					125			
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp
	130					135					140				
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
145					150					155					160

<210> 324  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 324

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1				5					10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
		20						25				30			
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
		35					40					45			
Lys	Glu	Ser	Leu	Leu	Glu	Gln	Phe	Lys	Gly	Tyr	Leu	Gly	Cys	Gln	Ala
	50					55					60				
Leu	Ser	Glu	Met	Ile	Gln	Phe	Tyr	Leu	Glu	Glu	Val	Met	Pro	Gln	Ala
65					70					75				80	
Glu	Asn	Gln	Asp	Pro	Asp	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
			85						90					95	
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
			100					105					110		
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
		115					120					125			
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp
	130					135					140				
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
145					150					155					160

<210> 325  
 <211> 160



<212> PRT  
<213> Homo sapiens

<400> 325

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1				5					10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
		20						25					30		
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
		35					40					45			
Lys	Glu	Ser	Leu	Leu	Glu	Asn	Phe	Lys	Gly	Tyr	Leu	Gly	Cys	Gln	Ala
	50					55					60				
Leu	Ser	Glu	Met	Ile	Gln	Phe	Tyr	Leu	Glu	Glu	Val	Met	Pro	Gln	Ala
65					70					75				80	
Glu	Asn	Gln	Asp	Pro	Asp	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
			85						90					95	
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
			100					105					110		
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
		115					120					125			
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp
	130					135					140				
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
145					150					155					160

<210> 326

<211> 160

<212> PRT

<213> Homo sapiens

<400> 326

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1				5					10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
		20						25					30		
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
		35					40					45			
Lys	Glu	Ser	Leu	Leu	Glu	Asp	Ile	Lys	Gly	Tyr	Leu	Gly	Cys	Gln	Ala
	50					55					60				
Leu	Ser	Glu	Met	Ile	Gln	Phe	Tyr	Leu	Glu	Glu	Val	Met	Pro	Gln	Ala
65					70					75				80	
Glu	Asn	Gln	Asp	Pro	Asp	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
			85						90					95	
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
			100					105					110		
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
		115					120					125			
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp
	130					135					140				
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
145					150					155					160

<210> 327

<211> 160

<212> PRT

<213> Homo sapiens

<400> 327

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1				5					10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg

20	25	30
Val Lys Thr Phe Phe Gln Met Lys Asp Gln Leu Asp Asn Leu Leu Leu		
35	40	45
Lys Glu Ser Leu Leu Glu Asp Val Lys Gly Tyr Leu Gly Cys Gln Ala		
50	55	60
Leu Ser Glu Met Ile Gln Phe Tyr Leu Glu Glu Val Met Pro Gln Ala		
65	70	75
Glu Asn Gln Asp Pro Asp Ile Lys Ala His Val Asn Ser Leu Gly Glu		
85	90	95
Asn Leu Lys Thr Leu Arg Leu Arg Leu Arg Arg Cys His Arg Phe Leu		
100	105	110
Pro Cys Glu Asn Lys Ser Lys Ala Val Glu Gln Val Lys Asn Ala Phe		
115	120	125
Asn Lys Leu Gln Glu Lys Gly Ile Tyr Lys Ala Met Ser Glu Phe Asp		
130	135	140
Ile Phe Ile Asn Tyr Ile Glu Ala Tyr Met Thr Met Lys Ile Arg Asn		
145	150	155
		160

<210> 328  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 328
Ser Pro Gly Gln Gly Thr Gln Ser Glu Asn Ser Cys Thr His Phe Pro
1 5 10 15
Gly Asn Leu Pro Asn Met Leu Arg Asp Leu Arg Asp Ala Phe Ser Arg
20 25 30
Val Lys Thr Phe Phe Gln Met Lys Asp Gln Leu Asp Asn Leu Leu Leu
35 40 45
Lys Glu Ser Leu Leu Glu Asp Phe Gln Gly Tyr Leu Gly Cys Gln Ala
50 55 60
Leu Ser Glu Met Ile Gln Phe Tyr Leu Glu Glu Val Met Pro Gln Ala
65 70 75 80
Glu Asn Gln Asp Pro Asp Ile Lys Ala His Val Asn Ser Leu Gly Glu
85 90 95
Asn Leu Lys Thr Leu Arg Leu Arg Leu Arg Arg Cys His Arg Phe Leu
100 105 110
Pro Cys Glu Asn Lys Ser Lys Ala Val Glu Gln Val Lys Asn Ala Phe
115 120 125
Asn Lys Leu Gln Glu Lys Gly Ile Tyr Lys Ala Met Ser Glu Phe Asp
130 135 140
Ile Phe Ile Asn Tyr Ile Glu Ala Tyr Met Thr Met Lys Ile Arg Asn
145 150 155 160

<210> 329  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 329
Ser Pro Gly Gln Gly Thr Gln Ser Glu Asn Ser Cys Thr His Phe Pro
1 5 10 15
Gly Asn Leu Pro Asn Met Leu Arg Asp Leu Arg Asp Ala Phe Ser Arg
20 25 30
Val Lys Thr Phe Phe Gln Met Lys Asp Gln Leu Asp Asn Leu Leu Leu
35 40 45
Lys Glu Ser Leu Leu Glu Asp Phe Asn Gly Tyr Leu Gly Cys Gln Ala
50 55 60
Leu Ser Glu Met Ile Gln Phe Tyr Leu Glu Glu Val Met Pro Gln Ala
65 70 75 80

Glu	Asn	Gln	Asp	Pro	Ala	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Glu
			85						90				95	
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe
			100					105					110	Leu
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala
			115				120						125	Phe
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe
			130			135					140			Asp
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg
145					150					155				160

<210> 330  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1			5						10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
			20					25					30		
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
			35				40					45			
Lys	Glu	Ser	Leu	Leu	Glu	Asp	Phe	Lys	Gly	His	Leu	Gly	Cys	Gln	Ala
			50			55					60				
Leu	Ser	Glu	Met	Ile	Gln	Phe	Tyr	Leu	Glu	Glu	Val	Met	Pro	Gln	Ala
65					70					75					80
Glu	Asn	Gln	Asp	Pro	Asp	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
			85						90					95	
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
			100					105					110		
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
			115				120						125		
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp
			130			135					140				
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
145					150					155					160

<210> 331  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1			5						10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
			20					25					30		
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
			35				40					45			
Lys	Glu	Ser	Leu	Leu	Glu	Asp	Phe	Lys	Gly	Ile	Leu	Gly	Cys	Gln	Ala
			50			55					60				
Leu	Ser	Glu	Met	Ile	Gln	Phe	Tyr	Leu	Glu	Glu	Val	Met	Pro	Gln	Ala
65					70					75					80
Glu	Asn	Gln	Asp	Pro	Asp	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
			85						90					95	
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
			100					105					110		
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
			115				120						125		
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp

130		135		140
Ile Phe Ile Asn Tyr	Ile Glu Ala Tyr Met	Thr Met Lys Ile Arg Asn		
145	150	155	160	

<210> 332  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 332

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1				5					10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
			20					25					30		
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
		35					40					45			
Lys	Glu	Ser	Leu	Leu	Glu	Asp	Phe	Lys	Gly	Tyr	Val	Gly	Cys	Gln	Ala
	50					55					60				
Leu	Ser	Glu	Met	Ile	Gln	Phe	Tyr	Leu	Glu	Glu	Val	Met	Pro	Gln	Ala
65					70					75				80	
Glu	Asn	Gln	Asp	Pro	Asp	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
				85					90					95	
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
			100					105					110		
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
		115					120						125		
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp
	130					135					140				
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
145					150					155					160

<210> 333  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 333

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1				5					10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
			20					25					30		
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
		35					40					45			
Lys	Glu	Ser	Leu	Leu	Glu	Asp	Phe	Lys	Gly	Tyr	Ile	Gly	Cys	Gln	Ala
	50					55					60				
Leu	Ser	Glu	Met	Ile	Gln	Phe	Tyr	Leu	Glu	Glu	Val	Met	Pro	Gln	Ala
65					70					75				80	
Glu	Asn	Gln	Asp	Pro	Asp	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
				85					90					95	
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
			100					105					110		
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
		115					120						125		
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp
	130					135					140				
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
145					150					155					160

<210> 334  
 <211> 160

<212> PRT  
<213> Homo sapiens

<400> 334

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1				5					10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
		20						25					30		
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
		35					40					45			
Lys	Glu	Ser	Leu	Leu	Glu	Asp	Phe	Lys	Gly	Tyr	Leu	Gly	Cys	Gln	Ala
	50					55					60				
Leu	Ser	Gln	Met	Ile	Gln	Phe	Tyr	Leu	Glu	Glu	Val	Met	Pro	Gln	Ala
65					70					75					80
Glu	Asn	Gln	Asp	Pro	Asp	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
			85						90					95	
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
			100					105					110		
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
		115					120					125			
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp
	130					135					140				
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
145					150					155					160

<210> 335

<211> 160

<212> PRT

<213> Homo sapiens

<400> 335

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1				5					10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
		20						25					30		
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
		35					40					45			
Lys	Glu	Ser	Leu	Leu	Glu	Asp	Phe	Lys	Gly	Tyr	Leu	Gly	Cys	Gln	Ala
	50					55					60				
Leu	Ser	Asn	Met	Ile	Gln	Phe	Tyr	Leu	Glu	Glu	Val	Met	Pro	Gln	Ala
65					70					75					80
Glu	Asn	Gln	Asp	Pro	Asp	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
			85						90					95	
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
			100					105					110		
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
		115					120					125			
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp
	130					135					140				
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
145					150					155					160

<210> 336

<211> 160

<212> PRT

<213> Homo sapiens

<400> 336

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1				5					10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg



Glu	Asn	Gln	Asp	Pro	Asp	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
			85						90					95	
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
			100					105					110		
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
		115					120						125		
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp
	130					135					140				
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
145					150					155					160

<210> 339  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1				5					10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
			20					25					30		
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
		35					40					45			
Lys	Glu	Ser	Leu	Leu	Glu	Asp	Phe	Lys	Gly	Tyr	Leu	Gly	Cys	Gln	Ala
	50					55					60				
Leu	Ser	Glu	Met	Ile	Gln	Ile	Tyr	Leu	Glu	Glu	Val	Met	Pro	Gln	Ala
65					70					75					80
Glu	Asn	Gln	Asp	Pro	Asp	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
			85						90					95	
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
			100					105					110		
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
		115					120						125		
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp
	130					135					140				
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
145					150					155					160

<210> 340  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1				5					10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
			20					25					30		
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
		35					40					45			
Lys	Glu	Ser	Leu	Leu	Glu	Asp	Phe	Lys	Gly	Tyr	Leu	Gly	Cys	Gln	Ala
	50					55					60				
Leu	Ser	Glu	Met	Ile	Gln	Val	Tyr	Leu	Glu	Glu	Val	Met	Pro	Gln	Ala
65					70					75					80
Glu	Asn	Gln	Asp	Pro	Asp	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
			85						90					95	
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
			100					105					110		
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
		115					120						125		
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp

130		135		140
Ile Phe Ile Asn Tyr	Ile Glu Ala Tyr Met	Thr Met Lys Ile Arg	Asn	
145	150	155	160	

<210> 341  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 341

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1			5					10						15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
			20					25					30		
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
		35					40					45			
Lys	Glu	Ser	Leu	Leu	Glu	Asp	Phe	Lys	Gly	Tyr	Leu	Gly	Cys	Gln	Ala
	50					55					60				
Leu	Ser	Glu	Met	Ile	Gln	Phe	His	Leu	Glu	Glu	Val	Met	Pro	Gln	Ala
65					70					75					80
Glu	Asn	Gln	Asp	Pro	Asp	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
			85						90					95	
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
			100					105					110		
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
		115					120						125		
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp
		130				135					140				
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
145					150					155					160

<210> 342  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 342

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1			5					10						15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
			20					25					30		
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
		35					40					45			
Lys	Glu	Ser	Leu	Leu	Glu	Asp	Phe	Lys	Gly	Tyr	Leu	Gly	Cys	Gln	Ala
	50					55					60				
Leu	Ser	Glu	Met	Ile	Gln	Phe	Ile	Leu	Glu	Glu	Val	Met	Pro	Gln	Ala
65					70					75					80
Glu	Asn	Gln	Asp	Pro	Asp	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
			85						90					95	
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
			100					105					110		
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
		115					120						125		
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp
		130				135					140				
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
145					150					155					160

<210> 343  
 <211> 160



<212> PRT  
 <213> Homo sapiens

<400> 343  
 Ser Pro Gly Gln Gly Thr Gln Ser Glu Asn Ser Cys Thr His Phe Pro  
 1 5 10 15  
 Gly Asn Leu Pro Asn Met Leu Arg Asp Leu Arg Asp Ala Phe Ser Arg  
 20 25 30  
 Val Lys Thr Phe Phe Gln Met Lys Asp Gln Leu Asp Asn Leu Leu Leu  
 35 40 45  
 Lys Glu Ser Leu Leu Glu Asp Phe Lys Gly Tyr Leu Gly Cys Gln Ala  
 50 55 60  
 Leu Ser Glu Met Ile Gln Phe Tyr Leu Gln Glu Val Met Pro Gln Ala  
 65 70 75 80  
 Glu Asn Gln Asp Pro Asp Ile Lys Ala His Val Asn Ser Leu Gly Glu  
 85 90 95  
 Asn Leu Lys Thr Leu Arg Leu Arg Leu Arg Arg Cys His Arg Phe Leu  
 100 105 110  
 Pro Cys Glu Asn Lys Ser Lys Ala Val Glu Gln Val Lys Asn Ala Phe  
 115 120 125  
 Asn Lys Leu Gln Glu Lys Gly Ile Tyr Lys Ala Met Ser Glu Phe Asp  
 130 135 140  
 Ile Phe Ile Asn Tyr Ile Glu Ala Tyr Met Thr Met Lys Ile Arg Asn  
 145 150 155 160

<210> 344  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 344  
 Ser Pro Gly Gln Gly Thr Gln Ser Glu Asn Ser Cys Thr His Phe Pro  
 1 5 10 15  
 Gly Asn Leu Pro Asn Met Leu Arg Asp Leu Arg Asp Ala Phe Ser Arg  
 20 25 30  
 Val Lys Thr Phe Phe Gln Met Lys Asp Gln Leu Asp Asn Leu Leu Leu  
 35 40 45  
 Lys Glu Ser Leu Leu Glu Asp Phe Lys Gly Tyr Leu Gly Cys Gln Ala  
 50 55 60  
 Leu Ser Glu Met Ile Gln Phe Tyr Leu Asn Glu Val Met Pro Gln Ala  
 65 70 75 80  
 Glu Asn Gln Asp Pro Asp Ile Lys Ala His Val Asn Ser Leu Gly Glu  
 85 90 95  
 Asn Leu Lys Thr Leu Arg Leu Arg Leu Arg Arg Cys His Arg Phe Leu  
 100 105 110  
 Pro Cys Glu Asn Lys Ser Lys Ala Val Glu Gln Val Lys Asn Ala Phe  
 115 120 125  
 Asn Lys Leu Gln Glu Lys Gly Ile Tyr Lys Ala Met Ser Glu Phe Asp  
 130 135 140  
 Ile Phe Ile Asn Tyr Ile Glu Ala Tyr Met Thr Met Lys Ile Arg Asn  
 145 150 155 160

<210> 345  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 345  
 Ser Pro Gly Gln Gly Thr Gln Ser Glu Asn Ser Cys Thr His Phe Pro  
 1 5 10 15  
 Gly Asn Leu Pro Asn Met Leu Arg Asp Leu Arg Asp Ala Phe Ser Arg

Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
		35					40					45			
Lys	Glu	Ser	Leu	Leu	Glu	Asp	Phe	Lys	Gly	Tyr	Leu	Gly	Cys	Gln	Ala
	50					55					60				
Leu	Ser	Glu	Met	Ile	Gln	Phe	Tyr	Leu	His	Glu	Val	Met	Pro	Gln	Ala
65					70					75				80	
Glu	Asn	Gln	Asp	Pro	Asp	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
			85					90						95	
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
		100						105					110		
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
	115						120					125			
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp
	130					135					140				
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
145					150					155					160

<210> 346  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1				5					10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
		20						25				30			
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
	35						40				45				
Lys	Glu	Ser	Leu	Leu	Glu	Asp	Phe	Lys	Gly	Tyr	Leu	Gly	Cys	Gln	Ala
	50					55					60				
Leu	Ser	Glu	Met	Ile	Gln	Phe	Tyr	Leu	Glu	Gln	Val	Met	Pro	Gln	Ala
65					70					75				80	
Glu	Asn	Gln	Asp	Pro	Asp	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
			85					90						95	
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
		100						105					110		
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
	115						120					125			
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp
	130					135					140				
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
145					150					155					160

<210> 347  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1				5					10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
		20						25				30			
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
	35						40				45				
Lys	Glu	Ser	Leu	Leu	Glu	Asp	Phe	Lys	Gly	Tyr	Leu	Gly	Cys	Gln	Ala
	50					55					60				
Leu	Ser	Glu	Met	Ile	Gln	Phe	Tyr	Leu	Glu	Asn	Val	Met	Pro	Gln	Ala



Asn	Lys	Leu	Gln	Glu		Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu		Asp
130						135					140				
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
145					150				155						160

<210> 350  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 350

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1				5					10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
		20						25					30		
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
	35						40					45			
Lys	Glu	Ser	Leu	Leu	Glu	Asp	Phe	Lys	Gly	Tyr	Leu	Gly	Cys	Gln	Ala
	50					55					60				
Leu	Ser	Glu	Met	Ile	Gln	Phe	Tyr	Leu	Glu	Glu	Val	Met	Ala	Gln	Ala
65					70					75					80
Glu	Asn	Gln	Asp	Pro	Asp	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
			85						90					95	
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
			100					105					110		
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
		115					120					125			
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp
	130					135					140				
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
145					150				155						160

<210> 351  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 351

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1				5					10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
		20						25					30		
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
	35						40					45			
Lys	Glu	Ser	Leu	Leu	Glu	Asp	Phe	Lys	Gly	Tyr	Leu	Gly	Cys	Gln	Ala
	50					55					60				
Leu	Ser	Glu	Met	Ile	Gln	Phe	Tyr	Leu	Glu	Glu	Val	Met	Pro	Gln	Ala
65					70					75					80
Gln	Asn	Gln	Asp	Pro	Asp	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
			85						90					95	
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
			100					105					110		
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
		115					120					125			
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp
	130					135					140				
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
145					150				155						160

<210> 352

<211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 352  
 Ser Pro Gly Gln Gly Thr Gln Ser Glu Asn Ser Cys Thr His Phe Pro  
 1 5 10 15  
 Gly Asn Leu Pro Asn Met Leu Arg Asp Leu Arg Asp Ala Phe Ser Arg  
 20 25 30  
 Val Lys Thr Phe Phe Gln Met Lys Asp Gln Leu Asp Asn Leu Leu Leu  
 35 40 45  
 Lys Glu Ser Leu Leu Glu Asp Phe Lys Gly Tyr Leu Gly Cys Gln Ala  
 50 55 60  
 Leu Ser Glu Met Ile Gln Phe Tyr Leu Glu Glu Val Met Pro Gln Ala  
 65 70 75 80  
 Asn Asn Gln Asp Pro Asp Ile Lys Ala His Val Asn Ser Leu Gly Glu  
 85 90 95  
 Asn Leu Lys Thr Leu Arg Leu Arg Leu Arg Arg Cys His Arg Phe Leu  
 100 105 110  
 Pro Cys Glu Asn Lys Ser Lys Ala Val Glu Gln Val Lys Asn Ala Phe  
 115 120 125  
 Asn Lys Leu Gln Glu Lys Gly Ile Tyr Lys Ala Met Ser Glu Phe Asp  
 130 135 140  
 Ile Phe Ile Asn Tyr Ile Glu Ala Tyr Met Thr Met Lys Ile Arg Asn  
 145 150 155 160

<210> 353  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 353  
 Ser Pro Gly Gln Gly Thr Gln Ser Glu Asn Ser Cys Thr His Phe Pro  
 1 5 10 15  
 Gly Asn Leu Pro Asn Met Leu Arg Asp Leu Arg Asp Ala Phe Ser Arg  
 20 25 30  
 Val Lys Thr Phe Phe Gln Met Lys Asp Gln Leu Asp Asn Leu Leu Leu  
 35 40 45  
 Lys Glu Ser Leu Leu Glu Asp Phe Lys Gly Tyr Leu Gly Cys Gln Ala  
 50 55 60  
 Leu Ser Glu Met Ile Gln Phe Tyr Leu Glu Glu Val Met Pro Gln Ala  
 65 70 75 80  
 His Asn Gln Asp Pro Asp Ile Lys Ala His Val Asn Ser Leu Gly Glu  
 85 90 95  
 Asn Leu Lys Thr Leu Arg Leu Arg Leu Arg Arg Cys His Arg Phe Leu  
 100 105 110  
 Pro Cys Glu Asn Lys Ser Lys Ala Val Glu Gln Val Lys Asn Ala Phe  
 115 120 125  
 Asn Lys Leu Gln Glu Lys Gly Ile Tyr Lys Ala Met Ser Glu Phe Asp  
 130 135 140  
 Ile Phe Ile Asn Tyr Ile Glu Ala Tyr Met Thr Met Lys Ile Arg Asn  
 145 150 155 160

<210> 354  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 354  
 Ser Pro Gly Gln Gly Thr Gln Ser Glu Asn Ser Cys Thr His Phe Pro  
 1 5 10 15

Gly	Asn	Leu	Pro	Asn	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Arg
			20				25					30	
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu
		35					40				45		Leu
Lys	Glu	Ser	Leu	Leu	Glu	Asp	Phe	Lys	Gly	Tyr	Leu	Gly	Cys
		50				55					60		Gln
Leu	Ser	Glu	Met	Ile	Gln	Phe	Tyr	Leu	Glu	Glu	Val	Met	Pro
		65			70					75			Gln
Glu	Asn	Gln	Gln	Pro	Asp	Ile	Lys	Ala	His	Val	Asn	Ser	Leu
			85						90				Gly
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg
			100					105				110	Phe
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn
		115				120					125		Ala
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu
		130				135					140		Phe
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile
					150					155			Arg
145													Asn
													160

<210> 355  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1				5					10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
			20					25				30			
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
		35					40				45				
Lys	Glu	Ser	Leu	Leu	Glu	Asp	Phe	Lys	Gly	Tyr	Leu	Gly	Cys	Gln	Ala
		50				55					60				
Leu	Ser	Glu	Met	Ile	Gln	Phe	Tyr	Leu	Glu	Glu	Val	Met	Pro	Gln	Ala
		65			70					75					80
Glu	Asn	Gln	Asn	Pro	Asp	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
			85						90					95	
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
			100					105					110		
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
		115				120					125				
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp
		130				135					140				
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
					150					155					160
145															

<210> 356  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1				5					10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
			20					25				30			
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
		35					40				45				
Lys	Glu	Ser	Leu	Leu	Glu	Asp	Phe	Lys	Gly	Tyr	Leu	Gly	Cys	Gln	Ala
		50				55					60				
Leu	Ser	Glu	Met	Ile	Gln	Phe	Tyr	Leu	Glu	Glu	Val	Met	Pro	Gln	Ala

65	Glu	Asn	Gln	Asp	Ser	Asp	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu	80
				85						75							
	Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu	95
			100						105						110		
	Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe	
			115					120						125			
	Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp	
			130				135						140				
	Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn	
145						150					155					160	

<210> 357  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 357	Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
	1				5					10					15	
	Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
			20						25					30		
	Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
			35				40						45			
	Lys	Glu	Ser	Leu	Leu	Glu	Asp	Phe	Lys	Gly	Tyr	Leu	Gly	Cys	Gln	Ala
			50				55					60				
	Leu	Ser	Glu	Met	Ile	Gln	Phe	Tyr	Leu	Glu	Glu	Val	Met	Pro	Gln	Ala
65					70					75					80	
	Glu	Asn	Gln	Asp	Ala	Asp	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
				85					90						95	
	Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
			100						105					110		
	Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
			115					120						125		
	Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp
			130				135						140			
	Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
145						150					155					160

<210> 358  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 358	Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
	1				5					10					15	
	Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
			20						25					30		
	Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
			35				40						45			
	Lys	Glu	Ser	Leu	Leu	Glu	Asp	Phe	Lys	Gly	Tyr	Leu	Gly	Cys	Gln	Ala
			50				55					60				
	Leu	Ser	Glu	Met	Ile	Gln	Phe	Tyr	Leu	Glu	Glu	Val	Met	Pro	Gln	Ala
65					70					75					80	
	Glu	Asn	Gln	Asp	Pro	Gln	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
				85					90						95	
	Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
			100						105					110		
	Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
			115					120						125		

Asn	Lys	Leu	Gln	Glu	Ile	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp
130					135						140				
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
145					150					155					160

<210> 359  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 359															
Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1				5					10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
			20					25					30		
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
		35					40					45			
Lys	Glu	Ser	Leu	Leu	Glu	Asp	Phe	Lys	Gly	Tyr	Leu	Gly	Cys	Gln	Ala
	50					55					60				
Leu	Ser	Glu	Met	Ile	Gln	Phe	Tyr	Leu	Glu	Glu	Val	Met	Pro	Gln	Ala
65					70					75					80
Glu	Asn	Gln	Asp	Pro	Asn	Ile	Lys	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
				85					90					95	
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
			100					105					110		
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
		115					120					125			
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp
		130				135					140				
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
145					150					155					160

<210> 360  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 360															
Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1				5					10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
			20					25					30		
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
		35					40					45			
Lys	Glu	Ser	Leu	Leu	Glu	Asp	Phe	Lys	Gly	Tyr	Leu	Gly	Cys	Gln	Ala
	50					55					60				
Leu	Ser	Glu	Met	Ile	Gln	Phe	Tyr	Leu	Glu	Glu	Val	Met	Pro	Gln	Ala
65					70					75					80
Glu	Asn	Gln	Asp	Pro	Asp	Ile	Gln	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
				85					90					95	
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
			100					105					110		
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
		115					120					125			
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp
		130				135					140				
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
145					150					155					160

<210> 361



<211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 361

Ser	Pro	Gly	Gln	Gly	Thr	Gln	Ser	Glu	Asn	Ser	Cys	Thr	His	Phe	Pro
1				5					10					15	
Gly	Asn	Leu	Pro	Asn	Met	Leu	Arg	Asp	Leu	Arg	Asp	Ala	Phe	Ser	Arg
			20					25					30		
Val	Lys	Thr	Phe	Phe	Gln	Met	Lys	Asp	Gln	Leu	Asp	Asn	Leu	Leu	Leu
		35					40					45			
Lys	Glu	Ser	Leu	Leu	Glu	Asp	Phe	Lys	Gly	Tyr	Leu	Gly	Cys	Gln	Ala
	50					55					60				
Leu	Ser	Glu	Met	Ile	Gln	Phe	Tyr	Leu	Glu	Glu	Val	Met	Pro	Gln	Ala
65					70					75					80
Glu	Asn	Gln	Asp	Pro	Asp	Ile	Asn	Ala	His	Val	Asn	Ser	Leu	Gly	Glu
			85						90					95	
Asn	Leu	Lys	Thr	Leu	Arg	Leu	Arg	Leu	Arg	Arg	Cys	His	Arg	Phe	Leu
			100					105					110		
Pro	Cys	Glu	Asn	Lys	Ser	Lys	Ala	Val	Glu	Gln	Val	Lys	Asn	Ala	Phe
		115					120						125		
Asn	Lys	Leu	Gln	Glu	Lys	Gly	Ile	Tyr	Lys	Ala	Met	Ser	Glu	Phe	Asp
		130				135					140				
Ile	Phe	Ile	Asn	Tyr	Ile	Glu	Ala	Tyr	Met	Thr	Met	Lys	Ile	Arg	Asn
145					150					155					160

<210> 362  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 362

Ala	Pro	Ala	Arg	Ser	Pro	Ser	Pro	Ser	Thr	Gln	Pro	Trp	Glu	His	Val
1				5					10					15	
Asn	Ala	Ile	Gln	Glu	Ala	Arg	Arg	Leu	Leu	Asn	Leu	Ser	Arg	Asp	Thr
			20					25					30		
Ala	Ala	Glu	Met	Asn	Gln	Thr	Val	Glu	Val	Ile	Ser	Glu	Met	Phe	Asp
		35					40					45			
Leu	Gln	Glu	Pro	Thr	Cys	Leu	Gln	Thr	Arg	Leu	Glu	Leu	Tyr	Lys	Gln
		50				55					60				
Gly	Leu	Arg	Gly	Ser	Leu	Thr	Lys	Leu	Lys	Gly	Pro	Leu	Thr	Met	Met
65					70					75					80
Ala	Ser	His	Tyr	Lys	Gln	His	Cys	Pro	Pro	Thr	Pro	Glu	Thr	Ser	Cys
				85					90					95	
Ala	Thr	Gln	Ile	Ile	Thr	Phe	Glu	Ser	Phe	Lys	Glu	Asn	Leu	Lys	Asp
			100					105					110		
Phe	Leu	Leu	Val	Ile	Pro	Phe	Asp	Cys	Trp	Glu	Pro	Val	Gln	Glu	
		115					120					125			

<210> 363  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 363

Ala	Pro	Ala	Arg	Ser	Pro	Ser	Pro	Ser	Thr	Gln	Pro	Trp	Glu	His	Val
1				5					10					15	
Asn	Ala	Ile	Gln	Glu	Ala	Arg	Arg	Leu	Leu	Asn	Leu	Ser	Arg	Asp	Thr
			20					25					30		
Ala	Ala	Glu	Met	Asn	Asn	Thr	Val	Glu	Val	Ile	Ser	Glu	Met	Phe	Asp
		35					40					45			
Leu	Gln	Glu	Pro	Thr	Cys	Leu	Gln	Thr	Arg	Leu	Glu	Leu	Tyr	Lys	Gln

50		55		60											
Gly	Leu	Arg	Gly	Ser	Leu	Thr	Lys	Leu	Lys	Gly	Pro	Leu	Thr	Met	Met
65					70					75				80	
Ala	Ser	His	Tyr	Lys	Gln	His	Cys	Pro	Pro	Thr	Pro	Glu	Thr	Ser	Cys
				85					90					95	
Ala	Thr	Gln	Ile	Ile	Thr	Phe	Glu	Ser	Phe	Lys	Glu	Asn	Leu	Lys	Asp
			100					105					110		
Phe	Leu	Leu	Val	Ile	Pro	Phe	Asp	Cys	Trp	Glu	Pro	Val	Gln	Glu	
			115				120						125		

<210> 364  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 364															
Ala	Pro	Ala	Arg	Ser	Pro	Ser	Pro	Ser	Thr	Gln	Pro	Trp	Glu	His	Val
1				5					10					15	
Asn	Ala	Ile	Gln	Glu	Ala	Arg	Arg	Leu	Leu	Asn	Leu	Ser	Arg	Asp	Thr
			20					25					30		
Ala	Ala	Glu	Met	Asn	His	Thr	Val	Glu	Val	Ile	Ser	Glu	Met	Phe	Asp
		35					40					45			
Leu	Gln	Glu	Pro	Thr	Cys	Leu	Gln	Thr	Arg	Leu	Glu	Leu	Tyr	Lys	Gln
		50				55					60				
Gly	Leu	Arg	Gly	Ser	Leu	Thr	Lys	Leu	Lys	Gly	Pro	Leu	Thr	Met	Met
65					70					75				80	
Ala	Ser	His	Tyr	Lys	Gln	His	Cys	Pro	Pro	Thr	Pro	Glu	Thr	Ser	Cys
				85					90					95	
Ala	Thr	Gln	Ile	Ile	Thr	Phe	Glu	Ser	Phe	Lys	Glu	Asn	Leu	Lys	Asp
			100					105					110		
Phe	Leu	Leu	Val	Ile	Pro	Phe	Asp	Cys	Trp	Glu	Pro	Val	Gln	Glu	
			115				120						125		

<210> 365  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 365															
Ala	Pro	Ala	Arg	Ser	Pro	Ser	Pro	Ser	Thr	Gln	Pro	Trp	Glu	His	Val
1				5					10					15	
Asn	Ala	Ile	Gln	Glu	Ala	Arg	Arg	Leu	Leu	Asn	Leu	Ser	Arg	Asp	Thr
			20					25					30		
Ala	Ala	Glu	Met	Asn	Glu	Thr	Val	Gln	Val	Ile	Ser	Glu	Met	Phe	Asp
		35					40					45			
Leu	Gln	Glu	Pro	Thr	Cys	Leu	Gln	Thr	Arg	Leu	Glu	Leu	Tyr	Lys	Gln
		50				55					60				
Gly	Leu	Arg	Gly	Ser	Leu	Thr	Lys	Leu	Lys	Gly	Pro	Leu	Thr	Met	Met
65					70					75				80	
Ala	Ser	His	Tyr	Lys	Gln	His	Cys	Pro	Pro	Thr	Pro	Glu	Thr	Ser	Cys
				85					90					95	
Ala	Thr	Gln	Ile	Ile	Thr	Phe	Glu	Ser	Phe	Lys	Glu	Asn	Leu	Lys	Asp
			100					105					110		
Phe	Leu	Leu	Val	Ile	Pro	Phe	Asp	Cys	Trp	Glu	Pro	Val	Gln	Glu	
			115				120						125		

<210> 366  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 366															
Ala	Pro	Ala	Arg	Ser	Pro	Ser	Pro	Ser	Thr	Gln	Pro	Trp	Glu	His	Val

1	5	10													
Asn	Ala	Ile	Gln	Glu	Ala	Arg	Arg	Leu	Leu	Asn	Leu	Ser	Arg	Asp	Thr
			20					25					30		
Ala	Ala	Glu	Met	Asn	Glu	Thr	Val	Asn	Val	Ile	Ser	Glu	Met	Phe	Asp
		35					40					45			
Leu	Gln	Glu	Pro	Thr	Cys	Leu	Gln	Thr	Arg	Leu	Glu	Leu	Tyr	Lys	Gln
		50				55					60				
Gly	Leu	Arg	Gly	Ser	Leu	Thr	Lys	Leu	Lys	Gly	Pro	Leu	Thr	Met	Met
65					70					75					80
Ala	Ser	His	Tyr	Lys	Gln	His	Cys	Pro	Pro	Thr	Pro	Glu	Thr	Ser	Cys
				85				90						95	
Ala	Thr	Gln	Ile	Ile	Thr	Phe	Glu	Ser	Phe	Lys	Glu	Asn	Leu	Lys	Asp
		100						105					110		
Phe	Leu	Leu	Val	Ile	Pro	Phe	Asp	Cys	Trp	Glu	Pro	Val	Gln	Glu	
		115					120					125			

<210> 367  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 367															
Ala	Pro	Ala	Arg	Ser	Pro	Ser	Pro	Ser	Thr	Gln	Pro	Trp	Glu	His	Val
1				5					10					15	
Asn	Ala	Ile	Gln	Glu	Ala	Arg	Arg	Leu	Leu	Asn	Leu	Ser	Arg	Asp	Thr
		20						25					30		
Ala	Ala	Glu	Met	Asn	Glu	Thr	Val	His	Val	Ile	Ser	Glu	Met	Phe	Asp
		35					40					45			
Leu	Gln	Glu	Pro	Thr	Cys	Leu	Gln	Thr	Arg	Leu	Glu	Leu	Tyr	Lys	Gln
		50				55					60				
Gly	Leu	Arg	Gly	Ser	Leu	Thr	Lys	Leu	Lys	Gly	Pro	Leu	Thr	Met	Met
65					70					75					80
Ala	Ser	His	Tyr	Lys	Gln	His	Cys	Pro	Pro	Thr	Pro	Glu	Thr	Ser	Cys
				85				90						95	
Ala	Thr	Gln	Ile	Ile	Thr	Phe	Glu	Ser	Phe	Lys	Glu	Asn	Leu	Lys	Asp
		100						105					110		
Phe	Leu	Leu	Val	Ile	Pro	Phe	Asp	Cys	Trp	Glu	Pro	Val	Gln	Glu	
		115					120					125			

<210> 368  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 368															
Ala	Pro	Ala	Arg	Ser	Pro	Ser	Pro	Ser	Thr	Gln	Pro	Trp	Glu	His	Val
1				5					10					15	
Asn	Ala	Ile	Gln	Glu	Ala	Arg	Arg	Leu	Leu	Asn	Leu	Ser	Arg	Asp	Thr
		20						25					30		
Ala	Ala	Glu	Met	Asn	Glu	Thr	Val	Glu	Val	Ile	Ser	Gln	Met	Phe	Asp
		35					40					45			
Leu	Gln	Glu	Pro	Thr	Cys	Leu	Gln	Thr	Arg	Leu	Glu	Leu	Tyr	Lys	Gln
		50				55					60				
Gly	Leu	Arg	Gly	Ser	Leu	Thr	Lys	Leu	Lys	Gly	Pro	Leu	Thr	Met	Met
65					70					75					80
Ala	Ser	His	Tyr	Lys	Gln	His	Cys	Pro	Pro	Thr	Pro	Glu	Thr	Ser	Cys
				85				90						95	
Ala	Thr	Gln	Ile	Ile	Thr	Phe	Glu	Ser	Phe	Lys	Glu	Asn	Leu	Lys	Asp
		100						105					110		
Phe	Leu	Leu	Val	Ile	Pro	Phe	Asp	Cys	Trp	Glu	Pro	Val	Gln	Glu	
		115					120					125			

<210> 369

<211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 369

Ala	Pro	Ala	Arg	Ser	Pro	Ser	Pro	Ser	Thr	Gln	Pro	Trp	Glu	His	Val
1				5					10					15	
Asn	Ala	Ile	Gln	Glu	Ala	Arg	Arg	Leu	Leu	Asn	Leu	Ser	Arg	Asp	Thr
			20					25					30		
Ala	Ala	Glu	Met	Asn	Glu	Thr	Val	Glu	Val	Ile	Ser	Asn	Met	Phe	Asp
		35					40					45			
Leu	Gln	Glu	Pro	Thr	Cys	Leu	Gln	Thr	Arg	Leu	Glu	Leu	Tyr	Lys	Gln
	50				55						60				
Gly	Leu	Arg	Gly	Ser	Leu	Thr	Lys	Leu	Lys	Gly	Pro	Leu	Thr	Met	Met
65				70						75					80
Ala	Ser	His	Tyr	Lys	Gln	His	Cys	Pro	Pro	Thr	Pro	Glu	Thr	Ser	Cys
				85					90					95	
Ala	Thr	Gln	Ile	Ile	Thr	Phe	Glu	Ser	Phe	Lys	Glu	Asn	Leu	Lys	Asp
			100					105					110		
Phe	Leu	Leu	Val	Ile	Pro	Phe	Asp	Cys	Trp	Glu	Pro	Val	Gln	Glu	
		115					120						125		

<210> 370  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 370

Ala	Pro	Ala	Arg	Ser	Pro	Ser	Pro	Ser	Thr	Gln	Pro	Trp	Glu	His	Val
1				5					10					15	
Asn	Ala	Ile	Gln	Glu	Ala	Arg	Arg	Leu	Leu	Asn	Leu	Ser	Arg	Asp	Thr
			20					25					30		
Ala	Ala	Glu	Met	Asn	Glu	Thr	Val	Glu	Val	Ile	Ser	His	Met	Phe	Asp
		35					40					45			
Leu	Gln	Glu	Pro	Thr	Cys	Leu	Gln	Thr	Arg	Leu	Glu	Leu	Tyr	Lys	Gln
	50				55						60				
Gly	Leu	Arg	Gly	Ser	Leu	Thr	Lys	Leu	Lys	Gly	Pro	Leu	Thr	Met	Met
65				70						75					80
Ala	Ser	His	Tyr	Lys	Gln	His	Cys	Pro	Pro	Thr	Pro	Glu	Thr	Ser	Cys
				85					90					95	
Ala	Thr	Gln	Ile	Ile	Thr	Phe	Glu	Ser	Phe	Lys	Glu	Asn	Leu	Lys	Asp
			100					105					110		
Phe	Leu	Leu	Val	Ile	Pro	Phe	Asp	Cys	Trp	Glu	Pro	Val	Gln	Glu	
		115					120						125		

<210> 371  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 371

Ala	Pro	Ala	Arg	Ser	Pro	Ser	Pro	Ser	Thr	Gln	Pro	Trp	Glu	His	Val
1				5					10					15	
Asn	Ala	Ile	Gln	Glu	Ala	Arg	Arg	Leu	Leu	Asn	Leu	Ser	Arg	Asp	Thr
			20					25					30		
Ala	Ala	Glu	Met	Asn	Glu	Thr	Val	Glu	Val	Ile	Ser	Glu	Val	Phe	Asp
		35					40					45			
Leu	Gln	Glu	Pro	Thr	Cys	Leu	Gln	Thr	Arg	Leu	Glu	Leu	Tyr	Lys	Gln
	50				55						60				
Gly	Leu	Arg	Gly	Ser	Leu	Thr	Lys	Leu	Lys	Gly	Pro	Leu	Thr	Met	Met
65				70						75					80
Ala	Ser	His	Tyr	Lys	Gln	His	Cys	Pro	Pro	Thr	Pro	Glu	Thr	Ser	Cys
				85					90					95	

Ala	Thr	Gln	Ile	Ile	Phe	Glu	Ser	Phe	Lys	Glu	Asn	Leu	Asp
			100				105					110	
Phe	Leu	Leu	Val	Ile	Pro	Phe	Asp	Cys	Trp	Glu	Pro	Val	Gln
			115				120					125	

<210> 372  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 372

Ala	Pro	Ala	Arg	Ser	Pro	Ser	Pro	Ser	Thr	Gln	Pro	Trp	Glu	His	Val
1				5					10					15	
Asn	Ala	Ile	Gln	Glu	Ala	Arg	Arg	Leu	Leu	Asn	Leu	Ser	Arg	Asp	Thr
			20					25					30		
Ala	Ala	Glu	Met	Asn	Glu	Thr	Val	Glu	Val	Ile	Ser	Glu	Ile	Phe	Asp
			35				40					45			
Leu	Gln	Glu	Pro	Thr	Cys	Leu	Gln	Thr	Arg	Leu	Glu	Leu	Tyr	Lys	Gln
			50			55					60				
Gly	Leu	Arg	Gly	Ser	Leu	Thr	Lys	Leu	Lys	Gly	Pro	Leu	Thr	Met	Met
65					70					75				80	
Ala	Ser	His	Tyr	Lys	Gln	His	Cys	Pro	Pro	Thr	Pro	Glu	Thr	Ser	Cys
				85					90					95	
Ala	Thr	Gln	Ile	Ile	Thr	Phe	Glu	Ser	Phe	Lys	Glu	Asn	Leu	Lys	Asp
			100					105					110		
Phe	Leu	Leu	Val	Ile	Pro	Phe	Asp	Cys	Trp	Glu	Pro	Val	Gln	Glu	
			115				120						125		

<210> 373  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 373

Ala	Pro	Ala	Arg	Ser	Pro	Ser	Pro	Ser	Thr	Gln	Pro	Trp	Glu	His	Val
1				5					10					15	
Asn	Ala	Ile	Gln	Glu	Ala	Arg	Arg	Leu	Leu	Asn	Leu	Ser	Arg	Asp	Thr
			20					25					30		
Ala	Ala	Glu	Met	Asn	Glu	Thr	Val	Glu	Val	Ile	Ser	Glu	Met	Phe	Gln
			35				40					45			
Leu	Gln	Glu	Pro	Thr	Cys	Leu	Gln	Thr	Arg	Leu	Glu	Leu	Tyr	Lys	Gln
			50			55					60				
Gly	Leu	Arg	Gly	Ser	Leu	Thr	Lys	Leu	Lys	Gly	Pro	Leu	Thr	Met	Met
65					70					75				80	
Ala	Ser	His	Tyr	Lys	Gln	His	Cys	Pro	Pro	Thr	Pro	Glu	Thr	Ser	Cys
				85					90					95	
Ala	Thr	Gln	Ile	Ile	Thr	Phe	Glu	Ser	Phe	Lys	Glu	Asn	Leu	Lys	Asp
			100					105					110		
Phe	Leu	Leu	Val	Ile	Pro	Phe	Asp	Cys	Trp	Glu	Pro	Val	Gln	Glu	
			115				120						125		

<210> 374  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 374

Ala	Pro	Ala	Arg	Ser	Pro	Ser	Pro	Ser	Thr	Gln	Pro	Trp	Glu	His	Val
1				5					10					15	
Asn	Ala	Ile	Gln	Glu	Ala	Arg	Arg	Leu	Leu	Asn	Leu	Ser	Arg	Asp	Thr
			20					25					30		
Ala	Ala	Glu	Met	Asn	Glu	Thr	Val	Glu	Val	Ile	Ser	Glu	Met	Phe	Asn
			35				40					45			

Leu	Gln	Glu	Pro	Thr	Leu	Gln	Thr	Arg	Leu	Glu	Leu	Tyr	Gln
50					55				60				
Gly	Leu	Arg	Gly	Ser	Leu	Thr	Lys	Leu	Lys	Gly	Pro	Leu	Thr
65					70				75				80
Ala	Ser	His	Tyr	Lys	Gln	His	Cys	Pro	Pro	Thr	Pro	Glu	Thr
				85				90					95
Ala	Thr	Gln	Ile	Ile	Thr	Phe	Glu	Ser	Phe	Lys	Glu	Asn	Leu
			100					105				110	Lys
Phe	Leu	Leu	Val	Ile	Pro	Phe	Asp	Cys	Trp	Glu	Pro	Val	Gln
		115					120					125	Glu

<210> 375  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

Ala	Pro	Ala	Arg	Ser	Pro	Ser	Pro	Ser	Thr	Gln	Pro	Trp	Glu	His	Val
1				5					10					15	
Asn	Ala	Ile	Gln	Glu	Ala	Arg	Arg	Leu	Leu	Asn	Leu	Ser	Arg	Asp	Thr
			20					25				30			
Ala	Ala	Glu	Met	Asn	Glu	Thr	Val	Glu	Val	Ile	Ser	Glu	Met	Phe	Asp
		35					40					45			
Val	Gln	Glu	Pro	Thr	Cys	Leu	Gln	Thr	Arg	Leu	Glu	Leu	Tyr	Lys	Gln
		50				55					60				
Gly	Leu	Arg	Gly	Ser	Leu	Thr	Lys	Leu	Lys	Gly	Pro	Leu	Thr	Met	Met
65					70				75					80	
Ala	Ser	His	Tyr	Lys	Gln	His	Cys	Pro	Pro	Thr	Pro	Glu	Thr	Ser	Cys
				85				90						95	
Ala	Thr	Gln	Ile	Ile	Thr	Phe	Glu	Ser	Phe	Lys	Glu	Asn	Leu	Lys	Asp
			100					105				110			
Phe	Leu	Leu	Val	Ile	Pro	Phe	Asp	Cys	Trp	Glu	Pro	Val	Gln	Glu	
		115					120					125			

<210> 376  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

Ala	Pro	Ala	Arg	Ser	Pro	Ser	Pro	Ser	Thr	Gln	Pro	Trp	Glu	His	Val
1				5					10					15	
Asn	Ala	Ile	Gln	Glu	Ala	Arg	Arg	Leu	Leu	Asn	Leu	Ser	Arg	Asp	Thr
			20					25				30			
Ala	Ala	Glu	Met	Asn	Glu	Thr	Val	Glu	Val	Ile	Ser	Glu	Met	Phe	Asp
		35					40					45			
Ile	Gln	Glu	Pro	Thr	Cys	Leu	Gln	Thr	Arg	Leu	Glu	Leu	Tyr	Lys	Gln
		50				55					60				
Gly	Leu	Arg	Gly	Ser	Leu	Thr	Lys	Leu	Lys	Gly	Pro	Leu	Thr	Met	Met
65					70				75					80	
Ala	Ser	His	Tyr	Lys	Gln	His	Cys	Pro	Pro	Thr	Pro	Glu	Thr	Ser	Cys
				85				90						95	
Ala	Thr	Gln	Ile	Ile	Thr	Phe	Glu	Ser	Phe	Lys	Glu	Asn	Leu	Lys	Asp
			100					105				110			
Phe	Leu	Leu	Val	Ile	Pro	Phe	Asp	Cys	Trp	Glu	Pro	Val	Gln	Glu	
		115					120					125			

<210> 377  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 377

Ala	Pro	Ala	Arg	Ser	Pro	Ser	Thr	Gln	Pro	Trp	Glu	Val
1				5			10				15	
Asn	Ala	Ile	Gln	Glu	Ala	Arg	Arg	Leu	Leu	Asn	Leu	Ser
		20					25				30	Arg
Ala	Ala	Glu	Met	Asn	Glu	Thr	Val	Glu	Val	Ile	Ser	Glu
		35					40				45	Met
Leu	Gln	Gln	Pro	Thr	Cys	Leu	Gln	Thr	Arg	Leu	Glu	Leu
		50				55					60	Tyr
Gly	Leu	Arg	Gly	Ser	Leu	Thr	Lys	Leu	Lys	Gly	Pro	Leu
65					70					75		Thr
Ala	Ser	His	Tyr	Lys	Gln	His	Cys	Pro	Pro	Thr	Pro	Glu
				85					90			95
Ala	Thr	Gln	Ile	Ile	Thr	Phe	Glu	Ser	Phe	Lys	Glu	Asn
			100					105				110
Phe	Leu	Leu	Val	Ile	Pro	Phe	Asp	Cys	Trp	Glu	Pro	Val
		115					120					125

<210> 378

<211> 127

<212> PRT

<213> Homo sapiens

<400> 378

Ala	Pro	Ala	Arg	Ser	Pro	Ser	Pro	Ser	Thr	Gln	Pro	Trp	Glu	His	Val
1				5					10					15	
Asn	Ala	Ile	Gln	Glu	Ala	Arg	Arg	Leu	Leu	Asn	Leu	Ser	Arg	Asp	Thr
		20					25						30		
Ala	Ala	Glu	Met	Asn	Glu	Thr	Val	Glu	Val	Ile	Ser	Glu	Met	Phe	Asp
		35					40					45			
Leu	Gln	Asn	Pro	Thr	Cys	Leu	Gln	Thr	Arg	Leu	Glu	Leu	Tyr	Lys	Gln
		50				55					60				
Gly	Leu	Arg	Gly	Ser	Leu	Thr	Lys	Leu	Lys	Gly	Pro	Leu	Thr	Met	Met
65					70					75				80	
Ala	Ser	His	Tyr	Lys	Gln	His	Cys	Pro	Pro	Thr	Pro	Glu	Thr	Ser	Cys
				85					90					95	
Ala	Thr	Gln	Ile	Ile	Thr	Phe	Glu	Ser	Phe	Lys	Glu	Asn	Leu	Lys	Asp
			100					105					110		
Phe	Leu	Leu	Val	Ile	Pro	Phe	Asp	Cys	Trp	Glu	Pro	Val	Gln	Glu	
		115					120						125		

<210> 379

<211> 127

<212> PRT

<213> Homo sapiens

<400> 379

Ala	Pro	Ala	Arg	Ser	Pro	Ser	Pro	Ser	Thr	Gln	Pro	Trp	Glu	His	Val
1				5					10					15	
Asn	Ala	Ile	Gln	Glu	Ala	Arg	Arg	Leu	Leu	Asn	Leu	Ser	Arg	Asp	Thr
		20					25						30		
Ala	Ala	Glu	Met	Asn	Glu	Thr	Val	Glu	Val	Ile	Ser	Glu	Met	Phe	Asp
		35					40					45			
Leu	Gln	His	Pro	Thr	Cys	Leu	Gln	Thr	Arg	Leu	Glu	Leu	Tyr	Lys	Gln
		50				55					60				
Gly	Leu	Arg	Gly	Ser	Leu	Thr	Lys	Leu	Lys	Gly	Pro	Leu	Thr	Met	Met
65					70					75				80	
Ala	Ser	His	Tyr	Lys	Gln	His	Cys	Pro	Pro	Thr	Pro	Glu	Thr	Ser	Cys
				85					90					95	
Ala	Thr	Gln	Ile	Ile	Thr	Phe	Glu	Ser	Phe	Lys	Glu	Asn	Leu	Lys	Asp
			100					105					110		
Phe	Leu	Leu	Val	Ile	Pro	Phe	Asp	Cys	Trp	Glu	Pro	Val	Gln	Glu	
		115					120						125		

<210> 380  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 380  
 Ala Pro Ala Arg Ser Pro Ser Pro Ser Thr Gln Pro Trp Glu His Val  
 1 5 10 15  
 Asn Ala Ile Gln Glu Ala Arg Arg Leu Leu Asn Leu Ser Arg Asp Thr  
 20 25 30  
 Ala Ala Glu Met Asn Glu Thr Val Glu Val Ile Ser Glu Met Phe Asp  
 35 40 45  
 Leu Gln Glu Pro Thr Cys Leu Gln Thr Arg Leu Gln Leu Tyr Lys Gln  
 50 55 60  
 Gly Leu Arg Gly Ser Leu Thr Lys Leu Lys Gly Pro Leu Thr Met Met  
 65 70 75 80  
 Ala Ser His Tyr Lys Gln His Cys Pro Pro Thr Pro Glu Thr Ser Cys  
 85 90 95  
 Ala Thr Gln Ile Ile Thr Phe Glu Ser Phe Lys Glu Asn Leu Lys Asp  
 100 105 110  
 Phe Leu Leu Val Ile Pro Phe Asp Cys Trp Glu Pro Val Gln Glu  
 115 120 125

<210> 381  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 381  
 Ala Pro Ala Arg Ser Pro Ser Pro Ser Thr Gln Pro Trp Glu His Val  
 1 5 10 15  
 Asn Ala Ile Gln Glu Ala Arg Arg Leu Leu Asn Leu Ser Arg Asp Thr  
 20 25 30  
 Ala Ala Glu Met Asn Glu Thr Val Glu Val Ile Ser Glu Met Phe Asp  
 35 40 45  
 Leu Gln Glu Pro Thr Cys Leu Gln Thr Arg Leu Asn Leu Tyr Lys Gln  
 50 55 60  
 Gly Leu Arg Gly Ser Leu Thr Lys Leu Lys Gly Pro Leu Thr Met Met  
 65 70 75 80  
 Ala Ser His Tyr Lys Gln His Cys Pro Pro Thr Pro Glu Thr Ser Cys  
 85 90 95  
 Ala Thr Gln Ile Ile Thr Phe Glu Ser Phe Lys Glu Asn Leu Lys Asp  
 100 105 110  
 Phe Leu Leu Val Ile Pro Phe Asp Cys Trp Glu Pro Val Gln Glu  
 115 120 125

<210> 382  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 382  
 Ala Pro Ala Arg Ser Pro Ser Pro Ser Thr Gln Pro Trp Glu His Val  
 1 5 10 15  
 Asn Ala Ile Gln Glu Ala Arg Arg Leu Leu Asn Leu Ser Arg Asp Thr  
 20 25 30  
 Ala Ala Glu Met Asn Glu Thr Val Glu Val Ile Ser Glu Met Phe Asp  
 35 40 45  
 Leu Gln Glu Pro Thr Cys Leu Gln Thr Arg Leu His Leu Tyr Lys Gln  
 50 55 60  
 Gly Leu Arg Gly Ser Leu Thr Lys Leu Lys Gly Pro Leu Thr Met Met  
 65 70 75 80  
 Ala Ser His Tyr Lys Gln His Cys Pro Pro Thr Pro Glu Thr Ser Cys





35	40	45
Leu Gln Glu Pro Thr Cys	Leu Gln Thr Arg Leu Glu Leu Tyr Lys Gln	
50	55	60
Gly Leu His Gly Ser Leu Thr Lys Leu Lys Gly Pro Leu Thr Met Met		
65	70	75
Ala Ser His Tyr Lys Gln His Cys Pro Pro Thr Pro Glu Thr Ser Cys		
85	90	95
Ala Thr Gln Ile Ile Thr Phe Glu Ser Phe Lys Glu Asn Leu Lys Asp		
100	105	110
Phe Leu Leu Val Ile Pro Phe Asp Cys Trp Glu Pro Val Gln Glu		
115	120	125

<210> 386  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 386
Ala Pro Ala Arg Ser Pro Ser Pro Ser Thr Gln Pro Trp Glu His Val
1 5 10 15
Asn Ala Ile Gln Glu Ala Arg Arg Leu Leu Asn Leu Ser Arg Asp Thr
20 25 30
Ala Ala Glu Met Asn Glu Thr Val Glu Val Ile Ser Glu Met Phe Asp
35 40 45
Leu Gln Glu Pro Thr Cys Leu Gln Thr Arg Leu Glu Leu Tyr Lys Gln
50 55 60
Gly Leu Gln Gly Ser Leu Thr Lys Leu Lys Gly Pro Leu Thr Met Met
65 70 75 80
Ala Ser His Tyr Lys Gln His Cys Pro Pro Thr Pro Glu Thr Ser Cys
85 90 95
Ala Thr Gln Ile Ile Thr Phe Glu Ser Phe Lys Glu Asn Leu Lys Asp
100 105 110
Phe Leu Leu Val Ile Pro Phe Asp Cys Trp Glu Pro Val Gln Glu
115 120 125

<210> 387  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 387
Ala Pro Ala Arg Ser Pro Ser Pro Ser Thr Gln Pro Trp Glu His Val
1 5 10 15
Asn Ala Ile Gln Glu Ala Arg Arg Leu Leu Asn Leu Ser Arg Asp Thr
20 25 30
Ala Ala Glu Met Asn Glu Thr Val Glu Val Ile Ser Glu Met Phe Asp
35 40 45
Leu Gln Glu Pro Thr Cys Leu Gln Thr Arg Leu Glu Leu Tyr Lys Gln
50 55 60
Gly Leu Arg Gly Ser Leu Thr Lys Leu Lys Gly Pro Leu Thr Met Met
65 70 75 80
Ala Ser His Tyr Lys Gln His Cys Pro Pro Thr Ser Glu Thr Ser Cys
85 90 95
Ala Thr Gln Ile Ile Thr Phe Glu Ser Phe Lys Glu Asn Leu Lys Asp
100 105 110
Phe Leu Leu Val Ile Pro Phe Asp Cys Trp Glu Pro Val Gln Glu
115 120 125

<210> 388  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 388

Ala	Pro	Ala	Arg	Ser	Pro	Ser	Pro	Ser	Thr	Gln	Pro	Trp	Glu	His	Val
1				5					10					15	
Asn	Ala	Ile	Gln	Glu	Ala	Arg	Arg	Leu	Leu	Asn	Leu	Ser	Arg	Asp	Thr
		20						25					30		
Ala	Ala	Glu	Met	Asn	Glu	Thr	Val	Glu	Val	Ile	Ser	Glu	Met	Phe	Asp
		35					40					45			
Leu	Gln	Glu	Pro	Thr	Cys	Leu	Gln	Thr	Arg	Leu	Glu	Leu	Tyr	Lys	Gln
	50				55					60					
Gly	Leu	Arg	Gly	Ser	Leu	Thr	Lys	Leu	Lys	Gly	Pro	Leu	Thr	Met	Met
65				70						75				80	
Ala	Ser	His	Tyr	Lys	Gln	His	Cys	Pro	Pro	Thr	Ala	Glu	Thr	Ser	Cys
			85					90						95	
Ala	Thr	Gln	Ile	Thr	Phe	Glu	Ser	Phe	Lys	Glu	Asn	Leu	Lys	Asp	
		100					105					110			
Phe	Leu	Leu	Val	Ile	Pro	Phe	Asp	Cys	Trp	Glu	Pro	Val	Gln	Glu	
		115					120					125			

<210> 389

<211> 127

<212> PRT

<213> Homo sapiens

<400> 389

Ala	Pro	Ala	Arg	Ser	Pro	Ser	Pro	Ser	Thr	Gln	Pro	Trp	Glu	His	Val
1				5					10					15	
Asn	Ala	Ile	Gln	Glu	Ala	Arg	Arg	Leu	Leu	Asn	Leu	Ser	Arg	Asp	Thr
		20						25					30		
Ala	Ala	Glu	Met	Asn	Glu	Thr	Val	Glu	Val	Ile	Ser	Glu	Met	Phe	Asp
		35					40					45			
Leu	Gln	Glu	Pro	Thr	Cys	Leu	Gln	Thr	Arg	Leu	Glu	Leu	Tyr	Lys	Gln
	50				55					60					
Gly	Leu	Arg	Gly	Ser	Leu	Thr	Lys	Leu	Lys	Gly	Pro	Leu	Thr	Met	Met
65				70						75				80	
Ala	Ser	His	Tyr	Lys	Gln	His	Cys	Pro	Pro	Thr	Pro	Gln	Thr	Ser	Cys
			85					90						95	
Ala	Thr	Gln	Ile	Thr	Phe	Glu	Ser	Phe	Lys	Glu	Asn	Leu	Lys	Asp	
		100					105					110			
Phe	Leu	Leu	Val	Ile	Pro	Phe	Asp	Cys	Trp	Glu	Pro	Val	Gln	Glu	
		115					120					125			

<210> 390

<211> 127

<212> PRT

<213> Homo sapiens

<400> 390

Ala	Pro	Ala	Arg	Ser	Pro	Ser	Pro	Ser	Thr	Gln	Pro	Trp	Glu	His	Val
1				5					10					15	
Asn	Ala	Ile	Gln	Glu	Ala	Arg	Arg	Leu	Leu	Asn	Leu	Ser	Arg	Asp	Thr
		20						25					30		
Ala	Ala	Glu	Met	Asn	Glu	Thr	Val	Glu	Val	Ile	Ser	Glu	Met	Phe	Asp
		35					40					45			
Leu	Gln	Glu	Pro	Thr	Cys	Leu	Gln	Thr	Arg	Leu	Glu	Leu	Tyr	Lys	Gln
	50				55					60					
Gly	Leu	Arg	Gly	Ser	Leu	Thr	Lys	Leu	Lys	Gly	Pro	Leu	Thr	Met	Met
65				70						75				80	
Ala	Ser	His	Tyr	Lys	Gln	His	Cys	Pro	Pro	Thr	Pro	Asn	Thr	Ser	Cys
			85					90						95	
Ala	Thr	Gln	Ile	Ile	Thr	Phe	Glu	Ser	Phe	Lys	Glu	Asn	Leu	Lys	Asp
		100					105					110			
Phe	Leu	Leu	Val	Ile	Pro	Phe	Asp	Cys	Trp	Glu	Pro	Val	Gln	Glu	
		115					120					125			

<210> 391  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 391  
 Ala Pro Ala Arg Ser Pro Ser Pro Ser Thr Gln Pro Trp Glu His Val  
 1 5 10 15  
 Asn Ala Ile Gln Glu Ala Arg Arg Leu Leu Asn Leu Ser Arg Asp Thr  
 20 25 30  
 Ala Ala Glu Met Asn Glu Thr Val Glu Val Ile Ser Glu Met Phe Asp  
 35 40 45  
 Leu Gln Glu Pro Thr Cys Leu Gln Thr Arg Leu Glu Leu Tyr Lys Gln  
 50 55 60  
 Gly Leu Arg Gly Ser Leu Thr Lys Leu Lys Gly Pro Leu Thr Met Met  
 65 70 75 80  
 Ala Ser His Tyr Lys Gln His Cys Pro Pro Thr Pro His Thr Ser Cys  
 85 90 95  
 Ala Thr Gln Ile Ile Thr Phe Glu Ser Phe Lys Glu Asn Leu Lys Asp  
 100 105 110  
 Phe Leu Leu Val Ile Pro Phe Asp Cys Trp Glu Pro Val Gln Glu  
 115 120 125

<210> 392  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 392  
 Ala Pro Ala Arg Ser Pro Ser Pro Ser Thr Gln Pro Trp Glu His Val  
 1 5 10 15  
 Asn Ala Ile Gln Glu Ala Arg Arg Leu Leu Asn Leu Ser Arg Asp Thr  
 20 25 30  
 Ala Ala Glu Met Asn Glu Thr Val Glu Val Ile Ser Glu Met Phe Asp  
 35 40 45  
 Leu Gln Glu Pro Thr Cys Leu Gln Thr Arg Leu Glu Leu Tyr Lys Gln  
 50 55 60  
 Gly Leu Arg Gly Ser Leu Thr Lys Leu Lys Gly Pro Leu Thr Met Met  
 65 70 75 80  
 Ala Ser His Tyr Lys Gln His Cys Pro Pro Thr Pro Glu Thr Ser Cys  
 85 90 95  
 Ala Thr Gln Ile Ile Thr Phe Glu Ser Phe Lys Glu Asn Leu Lys Asp  
 100 105 110  
 Phe Leu Leu Val Ile Pro Ile Asp Cys Trp Glu Pro Val Gln Glu  
 115 120 125

<210> 393  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 393  
 Ala Pro Ala Arg Ser Pro Ser Pro Ser Thr Gln Pro Trp Glu His Val  
 1 5 10 15  
 Asn Ala Ile Gln Glu Ala Arg Arg Leu Leu Asn Leu Ser Arg Asp Thr  
 20 25 30  
 Ala Ala Glu Met Asn Glu Thr Val Glu Val Ile Ser Glu Met Phe Asp  
 35 40 45  
 Leu Gln Glu Pro Thr Cys Leu Gln Thr Arg Leu Glu Leu Tyr Lys Gln  
 50 55 60  
 Gly Leu Arg Gly Ser Leu Thr Lys Leu Lys Gly Pro Leu Thr Met Met  
 65 70 75 80

Ala	Ser	His	Tyr	Lys	His	Cys	Pro	Pro	Thr	Pro	Glu	Thr	Cys
				85				90				95	
Ala	Thr	Gln	Ile	Ile	Thr	Phe	Glu	Ser	Phe	Lys	Glu	Asn	Leu
		100					105					110	Lys
Phe	Leu	Leu	Val	Ile	Pro	Val	Asp	Cys	Trp	Glu	Pro	Val	Gln
		115					120					125	Glu

<210> 394  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

Ala	Pro	Ala	Arg	Ser	Pro	Ser	Pro	Ser	Thr	Gln	Pro	Trp	Glu	His	Val
1				5					10					15	
Asn	Ala	Ile	Gln	Glu	Ala	Arg	Arg	Leu	Leu	Asn	Leu	Ser	Arg	Asp	Thr
		20					25						30		
Ala	Ala	Glu	Met	Asn	Glu	Thr	Val	Glu	Val	Ile	Ser	Glu	Met	Phe	Asp
		35					40					45			
Leu	Gln	Glu	Pro	Thr	Cys	Leu	Gln	Thr	Arg	Leu	Glu	Leu	Tyr	Lys	Gln
		50				55					60				
Gly	Leu	Arg	Gly	Ser	Leu	Thr	Lys	Leu	Lys	Gly	Pro	Leu	Thr	Met	Met
65					70				75						80
Ala	Ser	His	Tyr	Lys	Gln	His	Cys	Pro	Pro	Thr	Pro	Glu	Thr	Ser	Cys
				85					90					95	
Ala	Thr	Gln	Ile	Ile	Thr	Phe	Glu	Ser	Phe	Lys	Glu	Asn	Leu	Lys	Asp
		100					105						110		
Phe	Leu	Leu	Val	Ile	Pro	Phe	Gln	Cys	Trp	Glu	Pro	Val	Gln	Glu	
		115					120						125		

<210> 395  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

Ala	Pro	Ala	Arg	Ser	Pro	Ser	Pro	Ser	Thr	Gln	Pro	Trp	Glu	His	Val
1				5					10					15	
Asn	Ala	Ile	Gln	Glu	Ala	Arg	Arg	Leu	Leu	Asn	Leu	Ser	Arg	Asp	Thr
		20					25						30		
Ala	Ala	Glu	Met	Asn	Glu	Thr	Val	Glu	Val	Ile	Ser	Glu	Met	Phe	Asp
		35					40					45			
Leu	Gln	Glu	Pro	Thr	Cys	Leu	Gln	Thr	Arg	Leu	Glu	Leu	Tyr	Lys	Gln
		50				55					60				
Gly	Leu	Arg	Gly	Ser	Leu	Thr	Lys	Leu	Lys	Gly	Pro	Leu	Thr	Met	Met
65					70				75						80
Ala	Ser	His	Tyr	Lys	Gln	His	Cys	Pro	Pro	Thr	Pro	Glu	Thr	Ser	Cys
				85					90					95	
Ala	Thr	Gln	Ile	Ile	Thr	Phe	Glu	Ser	Phe	Lys	Glu	Asn	Leu	Lys	Asp
		100					105						110		
Phe	Leu	Leu	Val	Ile	Pro	Phe	Asn	Cys	Trp	Glu	Pro	Val	Gln	Glu	
		115					120						125		

<210> 396  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

Ala	Pro	Ala	Arg	Ser	Pro	Ser	Pro	Ser	Thr	Gln	Pro	Trp	Glu	His	Val
1				5					10					15	
Asn	Ala	Ile	Gln	Glu	Ala	Arg	Arg	Leu	Leu	Asn	Leu	Ser	Arg	Asp	Thr
		20					25						30		

Ala	Ala	Glu	Met	Asn	Thr	Val	Glu	Val	Ile	Ser	Glu	Met	Asp
	35					40					45		
Leu	Gln	Glu	Pro	Thr	Cys	Leu	Gln	Thr	Arg	Leu	Glu	Leu	Tyr
	50					55				60			
Gly	Leu	Arg	Gly	Ser	Leu	Thr	Lys	Leu	Lys	Gly	Pro	Leu	Thr
65					70					75			80
Ala	Ser	His	Tyr	Lys	Gln	His	Cys	Pro	Pro	Thr	Pro	Glu	Thr
				85					90				95
Ala	Thr	Gln	Ile	Ile	Thr	Phe	Glu	Ser	Phe	Lys	Glu	Asn	Leu
		100					105					110	
Phe	Leu	Leu	Val	Ile	Pro	Phe	Asp	Cys	Trp	Gln	Pro	Val	Gln
	115						120					125	

<210> 397  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

Ala	Pro	Ala	Arg	Ser	Pro	Ser	Pro	Ser	Thr	Gln	Pro	Trp	Glu	His	Val
1				5					10					15	
Asn	Ala	Ile	Gln	Glu	Ala	Arg	Arg	Leu	Leu	Asn	Leu	Ser	Arg	Asp	Thr
		20					25					30			
Ala	Ala	Glu	Met	Asn	Glu	Thr	Val	Glu	Val	Ile	Ser	Glu	Met	Phe	Asp
	35					40					45				
Leu	Gln	Glu	Pro	Thr	Cys	Leu	Gln	Thr	Arg	Leu	Glu	Leu	Tyr	Lys	Gln
	50					55				60					
Gly	Leu	Arg	Gly	Ser	Leu	Thr	Lys	Leu	Lys	Gly	Pro	Leu	Thr	Met	Met
65					70					75				80	
Ala	Ser	His	Tyr	Lys	Gln	His	Cys	Pro	Pro	Thr	Pro	Glu	Thr	Ser	Cys
				85					90					95	
Ala	Thr	Gln	Ile	Ile	Thr	Phe	Glu	Ser	Phe	Lys	Glu	Asn	Leu	Lys	Asp
		100					105						110		
Phe	Leu	Leu	Val	Ile	Pro	Phe	Asp	Cys	Trp	Asn	Pro	Val	Gln	Glu	
	115						120					125			

<210> 398  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

Ala	Pro	Ala	Arg	Ser	Pro	Ser	Pro	Ser	Thr	Gln	Pro	Trp	Glu	His	Val
1				5					10					15	
Asn	Ala	Ile	Gln	Glu	Ala	Arg	Arg	Leu	Leu	Asn	Leu	Ser	Arg	Asp	Thr
		20					25					30			
Ala	Ala	Glu	Met	Asn	Glu	Thr	Val	Glu	Val	Ile	Ser	Glu	Met	Phe	Asp
	35					40					45				
Leu	Gln	Glu	Pro	Thr	Cys	Leu	Gln	Thr	Arg	Leu	Glu	Leu	Tyr	Lys	Gln
	50					55				60					
Gly	Leu	Arg	Gly	Ser	Leu	Thr	Lys	Leu	Lys	Gly	Pro	Leu	Thr	Met	Met
65					70					75				80	
Ala	Ser	His	Tyr	Lys	Gln	His	Cys	Pro	Pro	Thr	Pro	Glu	Thr	Ser	Cys
				85					90					95	
Ala	Thr	Gln	Ile	Ile	Thr	Phe	Glu	Ser	Phe	Lys	Glu	Asn	Leu	Lys	Asp
		100					105						110		
Phe	Leu	Leu	Val	Ile	Pro	Phe	Asp	Cys	Trp	His	Pro	Val	Gln	Glu	
	115						120					125			

<210> 399  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 399

Ala	Pro	Ala	Arg	Ser	Pro	Ser	Pro	Ser	Thr	Gln	Pro	Trp	Glu	His	Val
1				5					10					15	
Asn	Ala	Ile	Gln	Glu	Ala	Arg	Arg	Leu	Leu	Asn	Leu	Ser	Arg	Asp	Thr
		20						25					30		
Ala	Ala	Glu	Met	Asn	Glu	Thr	Val	Glu	Val	Ile	Ser	Glu	Met	Phe	Asp
		35					40					45			
Leu	Gln	Glu	Pro	Thr	Cys	Leu	Gln	Thr	Arg	Leu	Glu	Leu	Tyr	Lys	Gln
		50				55					60				
Gly	Leu	Arg	Gly	Ser	Leu	Thr	Lys	Leu	Lys	Gly	Pro	Leu	Thr	Met	Met
65					70					75					80
Ala	Ser	His	Tyr	Lys	Gln	His	Cys	Pro	Pro	Thr	Pro	Glu	Thr	Ser	Cys
				85					90					95	
Ala	Thr	Gln	Ile	Ile	Thr	Phe	Glu	Ser	Phe	Lys	Glu	Asn	Leu	Lys	Asp
			100					105					110		
Phe	Leu	Leu	Val	Ile	Pro	Phe	Asp	Cys	Trp	Glu	Ser	Val	Gln	Glu	
			115				120						125		

<210> 400

<211> 127

<212> PRT

<213> Homo sapiens

<400> 400

Ala	Pro	Ala	Arg	Ser	Pro	Ser	Pro	Ser	Thr	Gln	Pro	Trp	Glu	His	Val
1				5					10					15	
Asn	Ala	Ile	Gln	Glu	Ala	Arg	Arg	Leu	Leu	Asn	Leu	Ser	Arg	Asp	Thr
		20						25					30		
Ala	Ala	Glu	Met	Asn	Glu	Thr	Val	Glu	Val	Ile	Ser	Glu	Met	Phe	Asp
		35					40					45			
Leu	Gln	Glu	Pro	Thr	Cys	Leu	Gln	Thr	Arg	Leu	Glu	Leu	Tyr	Lys	Gln
		50				55					60				
Gly	Leu	Arg	Gly	Ser	Leu	Thr	Lys	Leu	Lys	Gly	Pro	Leu	Thr	Met	Met
65					70					75					80
Ala	Ser	His	Tyr	Lys	Gln	His	Cys	Pro	Pro	Thr	Pro	Glu	Thr	Ser	Cys
				85					90					95	
Ala	Thr	Gln	Ile	Ile	Thr	Phe	Glu	Ser	Phe	Lys	Glu	Asn	Leu	Lys	Asp
			100					105					110		
Phe	Leu	Leu	Val	Ile	Pro	Phe	Asp	Cys	Trp	Glu	Ala	Val	Gln	Glu	
			115				120						125		

<210> 401

<211> 209

<212> PRT

<213> Homo sapiens

<400> 401

Thr	Gln	Gln	Cys	Ser	Phe	Gln	His	Ser	Pro	Ile	Ser	Ser	Asp	Phe	Ala
1				5					10					15	
Val	Lys	Ile	Arg	Glu	Leu	Ser	Asp	Tyr	Leu	Leu	Gln	Asp	Tyr	Pro	Val
		20						25					30		
Thr	Val	Ala	Ser	Asn	Leu	Gln	Asp	Glu	Glu	Leu	Cys	Gly	Gly	Leu	Trp
		35					40					45			
Arg	Leu	Val	Leu	Ala	Gln	Arg	Trp	Met	Glu	Arg	Leu	Lys	Thr	Val	Ala
		50				55					60				
Gly	Ser	Lys	Met	Gln	Gly	Leu	Leu	Glu	Arg	Val	Asn	Thr	Glu	Ile	His
65					70					75					80
Phe	Val	Thr	Lys	Cys	Ala	Phe	Gln	Pro	Pro	Pro	Ser	Cys	Leu	Arg	Phe
				85					90					95	
Val	Gln	Thr	Asn	Ile	Ser	Arg	Leu	Leu	Gln	Glu	Thr	Ser	Glu	Gln	Leu
			100					105					110		
Val	Ala	Leu	Lys	Pro	Trp	Ile	Thr	Arg	Gln	Asn	Phe	Ser	Arg	Cys	Leu

115	120	125
Glu Leu Gln Cys Gln Pro Asp Ser Ser Thr Leu Pro Pro Pro Trp Ser		
130	135	140
Pro Arg Pro Leu Glu Ala Thr Ala Pro Thr Ala Pro Gln Pro Pro Leu		
145	150	155
Leu Leu Leu Leu Leu Leu Pro Val Gly Leu Leu Leu Leu Ala Ala Ala		
165	170	175
Trp Cys Leu His Trp Gln Arg Thr Arg Arg Arg Thr Pro Arg Pro Gly		
180	185	190
Glu Gln Val Pro Pro Val Pro Ser Pro Gln Asp Leu Leu Leu Val Glu		
195	200	205
His		

<210> 402  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 402
Thr Gln Asn Cys Ser Phe Gln His Ser Pro Ile Ser Ser Asp Phe Ala
1 5 10 15
Val Lys Ile Arg Glu Leu Ser Asp Tyr Leu Leu Gln Asp Tyr Pro Val
20 25 30
Thr Val Ala Ser Asn Leu Gln Asp Glu Glu Leu Cys Gly Gly Leu Trp
35 40 45
Arg Leu Val Leu Ala Gln Arg Trp Met Glu Arg Leu Lys Thr Val Ala
50 55 60
Gly Ser Lys Met Gln Gly Leu Leu Glu Arg Val Asn Thr Glu Ile His
65 70 75 80
Phe Val Thr Lys Cys Ala Phe Gln Pro Pro Ser Cys Leu Arg Phe
85 90 95
Val Gln Thr Asn Ile Ser Arg Leu Leu Gln Glu Thr Ser Glu Gln Leu
100 105 110
Val Ala Leu Lys Pro Trp Ile Thr Arg Gln Asn Phe Ser Arg Cys Leu
115 120 125
Glu Leu Gln Cys Gln Pro Asp Ser Ser Thr Leu Pro Pro Pro Trp Ser
130 135 140
Pro Arg Pro Leu Glu Ala Thr Ala Pro Thr Ala Pro Gln Pro Pro Leu
145 150 155 160
Leu Leu Leu Leu Leu Leu Pro Val Gly Leu Leu Leu Leu Ala Ala Ala
165 170 175
Trp Cys Leu His Trp Gln Arg Thr Arg Arg Arg Thr Pro Arg Pro Gly
180 185 190
Glu Gln Val Pro Pro Val Pro Ser Pro Gln Asp Leu Leu Leu Val Glu
195 200 205
His

<210> 403  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 403
Thr Gln Asp Cys Ser Phe Gln His Ser Pro Ile Ser Ser Asp Phe Ala
1 5 10 15
Val Lys Ile Arg Glu Leu Ser Asp Tyr Leu Leu Gln Asp Tyr Pro Val
20 25 30
Thr Val Ala Ser Asn Leu Gln Gln Glu Glu Leu Cys Gly Gly Leu Trp
35 40 45
Arg Leu Val Leu Ala Gln Arg Trp Met Glu Arg Leu Lys Thr Val Ala
50 55 60



Gly	Ser	Lys	Met	Gln	Leu	Leu	Glu	Arg	Val	Asn	Thr	Glu	His
65				70					75				80
Phe	Val	Thr	Lys	Cys	Ala	Phe	Gln	Pro	Pro	Ser	Cys	Leu	Arg
			85					90					95
Val	Gln	Thr	Asn	Ile	Ser	Arg	Leu	Leu	Gln	Glu	Thr	Ser	Glu
			100				105						110
Val	Ala	Leu	Lys	Pro	Trp	Ile	Thr	Arg	Gln	Asn	Phe	Ser	Arg
		115				120						125	
Glu	Leu	Gln	Cys	Gln	Pro	Asp	Ser	Ser	Thr	Leu	Pro	Pro	Trp
	130					135					140		Ser
Pro	Arg	Pro	Leu	Glu	Ala	Thr	Ala	Pro	Thr	Ala	Pro	Gln	Pro
145					150					155			160
Leu	Leu	Leu	Leu	Leu	Leu	Pro	Val	Gly	Leu	Leu	Leu	Ala	Ala
			165					170					175
Trp	Cys	Leu	His	Trp	Gln	Arg	Thr	Arg	Arg	Arg	Thr	Pro	Arg
		180						185				190	Pro
Glu	Gln	Val	Pro	Pro	Val	Pro	Ser	Pro	Gln	Asp	Leu	Leu	Val
		195					200					205	Glu

His

<210> 404  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 404

Thr	Gln	Asp	Cys	Ser	Phe	Gln	His	Ser	Pro	Ile	Ser	Ser	Asp	Phe	Ala
1				5					10					15	
Val	Lys	Ile	Arg	Glu	Leu	Ser	Asp	Tyr	Leu	Leu	Gln	Asp	Tyr	Pro	Val
			20					25					30		
Thr	Val	Ala	Ser	Asn	Leu	Gln	Asn	Glu	Glu	Leu	Cys	Gly	Gly	Leu	Trp
		35					40					45			
Arg	Leu	Val	Leu	Ala	Gln	Arg	Trp	Met	Glu	Arg	Leu	Lys	Thr	Val	Ala
	50					55					60				
Gly	Ser	Lys	Met	Gln	Gly	Leu	Leu	Glu	Arg	Val	Asn	Thr	Glu	Ile	His
65				70						75					80
Phe	Val	Thr	Lys	Cys	Ala	Phe	Gln	Pro	Pro	Pro	Ser	Cys	Leu	Arg	Phe
			85					90						95	
Val	Gln	Thr	Asn	Ile	Ser	Arg	Leu	Leu	Gln	Glu	Thr	Ser	Glu	Gln	Leu
			100				105							110	
Val	Ala	Leu	Lys	Pro	Trp	Ile	Thr	Arg	Gln	Asn	Phe	Ser	Arg	Cys	Leu
		115				120						125			
Glu	Leu	Gln	Cys	Gln	Pro	Asp	Ser	Ser	Thr	Leu	Pro	Pro	Pro	Trp	Ser
	130					135					140				
Pro	Arg	Pro	Leu	Glu	Ala	Thr	Ala	Pro	Thr	Ala	Pro	Gln	Pro	Pro	Leu
145					150					155					160
Leu	Leu	Leu	Leu	Leu	Leu	Pro	Val	Gly	Leu	Leu	Leu	Leu	Ala	Ala	Ala
			165					170						175	
Trp	Cys	Leu	His	Trp	Gln	Arg	Thr	Arg	Arg	Arg	Thr	Pro	Arg	Pro	Gly
		180						185					190		
Glu	Gln	Val	Pro	Pro	Val	Pro	Ser	Pro	Gln	Asp	Leu	Leu	Leu	Val	Glu
		195					200					205			

His

<210> 405  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 405

Thr	Gln	Asp	Cys	Ser	Phe	Gln	His	Ser	Pro	Ile	Ser	Ser	Asp	Phe	Ala
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

1	5	10																	
Val	Lys	Ile	Arg	Glu	Leu	Ser	Asp	Tyr	Leu	Leu	Gln	Asp	Tyr	Pro	Val				
			20					25					30						
Thr	Val	Ala	Ser	Asn	Leu	Gln	Asp	Glu	Gln	Leu	Cys	Gly	Gly	Leu	Trp				
		35					40					45							
Arg	Leu	Val	Leu	Ala	Gln	Arg	Trp	Met	Glu	Arg	Leu	Lys	Thr	Val	Ala				
		50				55					60								
Gly	Ser	Lys	Met	Gln	Gly	Leu	Leu	Glu	Arg	Val	Asn	Thr	Glu	Ile	His				
65				70						75					80				
Phe	Val	Thr	Lys	Cys	Ala	Phe	Gln	Pro	Pro	Pro	Ser	Cys	Leu	Arg	Phe				
				85					90					95					
Val	Gln	Thr	Asn	Ile	Ser	Arg	Leu	Leu	Gln	Glu	Thr	Ser	Glu	Gln	Leu				
			100					105					110						
Val	Ala	Leu	Lys	Pro	Trp	Ile	Thr	Arg	Gln	Asn	Phe	Ser	Arg	Cys	Leu				
		115					120						125						
Glu	Leu	Gln	Cys	Gln	Pro	Asp	Ser	Ser	Thr	Leu	Pro	Pro	Pro	Trp	Ser				
		130				135					140								
Pro	Arg	Pro	Leu	Glu	Ala	Thr	Ala	Pro	Thr	Ala	Pro	Gln	Pro	Pro	Leu				
145					150					155					160				
Leu	Leu	Leu	Leu	Leu	Leu	Pro	Val	Gly	Leu	Leu	Leu	Leu	Ala	Ala	Ala				
				165					170					175					
Trp	Cys	Leu	His	Trp	Gln	Arg	Thr	Arg	Arg	Arg	Thr	Pro	Arg	Pro	Gly				
			180					185					190						
Glu	Gln	Val	Pro	Pro	Val	Pro	Ser	Pro	Gln	Asp	Leu	Leu	Leu	Val	Glu				
		195					200					205							

His

<210> 406  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 406

Thr	Gln	Asp	Cys	Ser	Phe	Gln	His	Ser	Pro	Ile	Ser	Ser	Asp	Phe	Ala				
1				5					10					15					
Val	Lys	Ile	Arg	Glu	Leu	Ser	Asp	Tyr	Leu	Leu	Gln	Asp	Tyr	Pro	Val				
			20					25					30						
Thr	Val	Ala	Ser	Asn	Leu	Gln	Asp	Glu	Asn	Leu	Cys	Gly	Gly	Leu	Trp				
		35					40					45							
Arg	Leu	Val	Leu	Ala	Gln	Arg	Trp	Met	Glu	Arg	Leu	Lys	Thr	Val	Ala				
		50				55					60								
Gly	Ser	Lys	Met	Gln	Gly	Leu	Leu	Glu	Arg	Val	Asn	Thr	Glu	Ile	His				
65				70						75					80				
Phe	Val	Thr	Lys	Cys	Ala	Phe	Gln	Pro	Pro	Pro	Ser	Cys	Leu	Arg	Phe				
				85					90					95					
Val	Gln	Thr	Asn	Ile	Ser	Arg	Leu	Leu	Gln	Glu	Thr	Ser	Glu	Gln	Leu				
			100					105					110						
Val	Ala	Leu	Lys	Pro	Trp	Ile	Thr	Arg	Gln	Asn	Phe	Ser	Arg	Cys	Leu				
		115					120						125						
Glu	Leu	Gln	Cys	Gln	Pro	Asp	Ser	Ser	Thr	Leu	Pro	Pro	Pro	Trp	Ser				
		130				135					140								
Pro	Arg	Pro	Leu	Glu	Ala	Thr	Ala	Pro	Thr	Ala	Pro	Gln	Pro	Pro	Leu				
145					150					155					160				
Leu	Leu	Leu	Leu	Leu	Leu	Pro	Val	Gly	Leu	Leu	Leu	Leu	Ala	Ala	Ala				
				165					170					175					
Trp	Cys	Leu	His	Trp	Gln	Arg	Thr	Arg	Arg	Arg	Thr	Pro	Arg	Pro	Gly				
			180					185					190						
Glu	Gln	Val	Pro	Pro	Val	Pro	Ser	Pro	Gln	Asp	Leu	Leu	Leu	Val	Glu				
		195					200					205							

His

<210> 407  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 407

Thr	Gln	Asp	Cys	Ser	Phe	Gln	His	Ser	Pro	Ile	Ser	Ser	Asp	Phe	Ala
1				5					10					15	
Val	Lys	Ile	Arg	Glu	Leu	Ser	Asp	Tyr	Leu	Leu	Gln	Asp	Tyr	Pro	Val
			20					25					30		
Thr	Val	Ala	Ser	Asn	Leu	Gln	Asp	Glu	His	Leu	Cys	Gly	Gly	Leu	Trp
		35					40					45			
Arg	Leu	Val	Leu	Ala	Gln	Arg	Trp	Met	Glu	Arg	Leu	Lys	Thr	Val	Ala
		50				55					60				
Gly	Ser	Lys	Met	Gln	Gly	Leu	Leu	Glu	Arg	Val	Asn	Thr	Glu	Ile	His
65				70						75					80
Phe	Val	Thr	Lys	Cys	Ala	Phe	Gln	Pro	Pro	Pro	Ser	Cys	Leu	Arg	Phe
				85				90						95	
Val	Gln	Thr	Asn	Ile	Ser	Arg	Leu	Leu	Gln	Glu	Thr	Ser	Glu	Gln	Leu
			100					105					110		
Val	Ala	Leu	Lys	Pro	Trp	Ile	Thr	Arg	Gln	Asn	Phe	Ser	Arg	Cys	Leu
		115					120					125			
Glu	Leu	Gln	Cys	Gln	Pro	Asp	Ser	Ser	Thr	Leu	Pro	Pro	Pro	Trp	Ser
		130				135					140				
Pro	Arg	Pro	Leu	Glu	Ala	Thr	Ala	Pro	Thr	Ala	Pro	Gln	Pro	Pro	Leu
145					150					155					160
Leu	Leu	Leu	Leu	Leu	Leu	Pro	Val	Gly	Leu	Leu	Leu	Leu	Ala	Ala	Ala
				165				170						175	
Trp	Cys	Leu	His	Trp	Gln	Arg	Thr	Arg	Arg	Arg	Thr	Pro	Arg	Pro	Gly
			180					185					190		
Glu	Gln	Val	Pro	Pro	Val	Pro	Ser	Pro	Gln	Asp	Leu	Leu	Leu	Val	Glu
		195					200					205			

His

<210> 408  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 408

Thr	Gln	Asp	Cys	Ser	Phe	Gln	His	Ser	Pro	Ile	Ser	Ser	Asp	Phe	Ala
1				5					10					15	
Val	Lys	Ile	Arg	Glu	Leu	Ser	Asp	Tyr	Leu	Leu	Gln	Asp	Tyr	Pro	Val
			20					25					30		
Thr	Val	Ala	Ser	Asn	Leu	Gln	Asp	Glu	Glu	Val	Cys	Gly	Gly	Leu	Trp
		35					40					45			
Arg	Leu	Val	Leu	Ala	Gln	Arg	Trp	Met	Glu	Arg	Leu	Lys	Thr	Val	Ala
		50				55					60				
Gly	Ser	Lys	Met	Gln	Gly	Leu	Leu	Glu	Arg	Val	Asn	Thr	Glu	Ile	His
65				70						75					80
Phe	Val	Thr	Lys	Cys	Ala	Phe	Gln	Pro	Pro	Pro	Ser	Cys	Leu	Arg	Phe
				85				90						95	
Val	Gln	Thr	Asn	Ile	Ser	Arg	Leu	Leu	Gln	Glu	Thr	Ser	Glu	Gln	Leu
			100					105					110		
Val	Ala	Leu	Lys	Pro	Trp	Ile	Thr	Arg	Gln	Asn	Phe	Ser	Arg	Cys	Leu
		115					120					125			
Glu	Leu	Gln	Cys	Gln	Pro	Asp	Ser	Ser	Thr	Leu	Pro	Pro	Pro	Trp	Ser
		130				135					140				
Pro	Arg	Pro	Leu	Glu	Ala	Thr	Ala	Pro	Thr	Ala	Pro	Gln	Pro	Pro	Leu
145					150					155					160
Leu	Leu	Leu	Leu	Leu	Leu	Pro	Val	Gly	Leu	Leu	Leu	Leu	Ala	Ala	Ala
				165				170						175	

Trp Cys Leu His Trp Cys Arg Thr Arg Arg Arg Thr Pro Arg Phe Gly  
 180 185 190  
 Glu Gln Val Pro Pro Val Pro Ser Pro Gln Asp Leu Leu Leu Val Glu  
 195 200 205  
 His

<210> 409  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 409  
 Thr Gln Asp Cys Ser Phe Gln His Ser Pro Ile Ser Ser Asp Phe Ala  
 1 5 10 15  
 Val Lys Ile Arg Glu Leu Ser Asp Tyr Leu Leu Gln Asp Tyr Pro Val  
 20 25 30  
 Thr Val Ala Ser Asn Leu Gln Asp Glu Glu Ile Cys Gly Gly Leu Trp  
 35 40 45  
 Arg Leu Val Leu Ala Gln Arg Trp Met Glu Arg Leu Lys Thr Val Ala  
 50 55 60  
 Gly Ser Lys Met Gln Gly Leu Leu Glu Arg Val Asn Thr Glu Ile His  
 65 70 75 80  
 Phe Val Thr Lys Cys Ala Phe Gln Pro Pro Pro Ser Cys Leu Arg Phe  
 85 90 95  
 Val Gln Thr Asn Ile Ser Arg Leu Leu Gln Glu Thr Ser Glu Gln Leu  
 100 105 110  
 Val Ala Leu Lys Pro Trp Ile Thr Arg Gln Asn Phe Ser Arg Cys Leu  
 115 120 125  
 Glu Leu Gln Cys Gln Pro Asp Ser Ser Thr Leu Pro Pro Pro Trp Ser  
 130 135 140  
 Pro Arg Pro Leu Glu Ala Thr Ala Pro Thr Ala Pro Gln Pro Pro Leu  
 145 150 155 160  
 Leu Leu Leu Leu Leu Leu Pro Val Gly Leu Leu Leu Leu Ala Ala Ala  
 165 170 175  
 Trp Cys Leu His Trp Gln Arg Thr Arg Arg Arg Thr Pro Arg Pro Gly  
 180 185 190  
 Glu Gln Val Pro Pro Val Pro Ser Pro Gln Asp Leu Leu Leu Val Glu  
 195 200 205  
 His

<210> 410  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 410  
 Thr Gln Asp Cys Ser Phe Gln His Ser Pro Ile Ser Ser Asp Phe Ala  
 1 5 10 15  
 Val Lys Ile Arg Glu Leu Ser Asp Tyr Leu Leu Gln Asp Tyr Pro Val  
 20 25 30  
 Thr Val Ala Ser Asn Leu Gln Asp Glu Glu Leu Cys Gly Gly Leu Trp  
 35 40 45  
 Arg Leu Val Leu Ala Gln His Trp Met Glu Arg Leu Lys Thr Val Ala  
 50 55 60  
 Gly Ser Lys Met Gln Gly Leu Leu Glu Arg Val Asn Thr Glu Ile His  
 65 70 75 80  
 Phe Val Thr Lys Cys Ala Phe Gln Pro Pro Pro Ser Cys Leu Arg Phe  
 85 90 95  
 Val Gln Thr Asn Ile Ser Arg Leu Leu Gln Glu Thr Ser Glu Gln Leu  
 100 105 110  
 Val Ala Leu Lys Pro Trp Ile Thr Arg Gln Asn Phe Ser Arg Cys Leu



Gly	Ser	Lys	Met	Gln	Leu	Leu	Glu	Arg	Val	Asn	Thr	Glu	His
65				70					75				80
Phe	Val	Thr	Lys	Cys	Ala	Phe	Gln	Pro	Pro	Ser	Cys	Leu	Arg
			85					90				95	Phe
Val	Gln	Thr	Asn	Ile	Ser	Arg	Leu	Leu	Gln	Glu	Thr	Ser	Glu
			100				105					110	Gln
Val	Ala	Leu	Lys	Pro	Trp	Ile	Thr	Arg	Gln	Asn	Phe	Ser	Arg
			115				120					125	Cys
Glu	Leu	Gln	Cys	Gln	Pro	Asp	Ser	Ser	Thr	Leu	Pro	Pro	Trp
			130			135					140		Ser
Pro	Arg	Pro	Leu	Glu	Ala	Thr	Ala	Pro	Thr	Ala	Pro	Gln	Pro
					150				155				Leu
Leu	Leu	Leu	Leu	Leu	Leu	Pro	Val	Gly	Leu	Leu	Leu	Ala	Ala
				165				170					Ala
Trp	Cys	Leu	His	Trp	Gln	Arg	Thr	Arg	Arg	Thr	Pro	Arg	Pro
			180					185				190	Gly
Glu	Gln	Val	Pro	Pro	Val	Pro	Ser	Pro	Gln	Asp	Leu	Leu	Val
			195				200					205	Glu

His

<210> 413  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 413

Thr	Gln	Asp	Cys	Ser	Phe	Gln	His	Ser	Pro	Ile	Ser	Ser	Asp	Phe	Ala
1				5					10					15	
Val	Lys	Ile	Arg	Glu	Leu	Ser	Asp	Tyr	Leu	Leu	Gln	Asp	Tyr	Pro	Val
			20					25					30		
Thr	Val	Ala	Ser	Asn	Leu	Gln	Asp	Glu	Glu	Leu	Cys	Gly	Gly	Leu	Trp
			35				40					45			
Arg	Leu	Val	Leu	Ala	Gln	Arg	Trp	Met	Asn	Arg	Leu	Lys	Thr	Val	Ala
			50			55					60				
Gly	Ser	Lys	Met	Gln	Gly	Leu	Leu	Glu	Arg	Val	Asn	Thr	Glu	Ile	His
65				70					75						80
Phe	Val	Thr	Lys	Cys	Ala	Phe	Gln	Pro	Pro	Ser	Cys	Leu	Arg	Phe	
			85					90					95		
Val	Gln	Thr	Asn	Ile	Ser	Arg	Leu	Leu	Gln	Glu	Thr	Ser	Glu	Gln	Leu
			100				105						110		
Val	Ala	Leu	Lys	Pro	Trp	Ile	Thr	Arg	Gln	Asn	Phe	Ser	Arg	Cys	Leu
			115				120					125			
Glu	Leu	Gln	Cys	Gln	Pro	Asp	Ser	Ser	Thr	Leu	Pro	Pro	Pro	Trp	Ser
			130			135					140				
Pro	Arg	Pro	Leu	Glu	Ala	Thr	Ala	Pro	Thr	Ala	Pro	Gln	Pro	Pro	Leu
					150				155						160
Leu	Leu	Leu	Leu	Leu	Leu	Pro	Val	Gly	Leu	Leu	Leu	Leu	Ala	Ala	Ala
				165				170						175	
Trp	Cys	Leu	His	Trp	Gln	Arg	Thr	Arg	Arg	Arg	Thr	Pro	Arg	Pro	Gly
			180					185					190		
Glu	Gln	Val	Pro	Pro	Val	Pro	Ser	Pro	Gln	Asp	Leu	Leu	Leu	Val	Glu
			195				200					205			

His

<210> 414  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 414

Thr	Gln	Asp	Cys	Ser	Phe	Gln	His	Ser	Pro	Ile	Ser	Ser	Asp	Phe	Ala
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

1	5	10															
Val	Lys	Ile	Arg	Glu	Leu	Ser	Asp	Tyr	Leu	Leu	Gln	Asp	Tyr	Pro	Val		
			20					25					30				
Thr	Val	Ala	Ser	Asn	Leu	Gln	Asp	Glu	Glu	Leu	Cys	Gly	Gly	Leu	Trp		
		35					40					45					
Arg	Leu	Val	Leu	Ala	Gln	Arg	Trp	Met	His	Arg	Leu	Lys	Thr	Val	Ala		
		50				55					60						
Gly	Ser	Lys	Met	Gln	Gly	Leu	Leu	Glu	Arg	Val	Asn	Thr	Glu	Ile	His		
65					70					75					80		
Phe	Val	Thr	Lys	Cys	Ala	Phe	Gln	Pro	Pro	Pro	Ser	Cys	Leu	Arg	Phe		
				85				90						95			
Val	Gln	Thr	Asn	Ile	Ser	Arg	Leu	Leu	Gln	Glu	Thr	Ser	Glu	Gln	Leu		
			100					105					110				
Val	Ala	Leu	Lys	Pro	Trp	Ile	Thr	Arg	Gln	Asn	Phe	Ser	Arg	Cys	Leu		
		115					120						125				
Glu	Leu	Gln	Cys	Gln	Pro	Asp	Ser	Ser	Thr	Leu	Pro	Pro	Pro	Trp	Ser		
		130				135					140						
Pro	Arg	Pro	Leu	Glu	Ala	Thr	Ala	Pro	Thr	Ala	Pro	Gln	Pro	Pro	Leu		
145					150					155					160		
Leu	Leu	Leu	Leu	Leu	Leu	Pro	Val	Gly	Leu	Leu	Leu	Leu	Ala	Ala	Ala		
				165				170						175			
Trp	Cys	Leu	His	Trp	Gln	Arg	Thr	Arg	Arg	Arg	Thr	Pro	Arg	Pro	Gly		
			180					185					190				
Glu	Gln	Val	Pro	Pro	Val	Pro	Ser	Pro	Gln	Asp	Leu	Leu	Leu	Val	Glu		
		195					200					205					

His

<210> 415  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

Thr	Gln	Asp	Cys	Ser	Phe	Gln	His	Ser	Pro	Ile	Ser	Ser	Asp	Phe	Ala		
1				5					10					15			
Val	Lys	Ile	Arg	Glu	Leu	Ser	Asp	Tyr	Leu	Leu	Gln	Asp	Tyr	Pro	Val		
			20					25					30				
Thr	Val	Ala	Ser	Asn	Leu	Gln	Asp	Glu	Glu	Leu	Cys	Gly	Gly	Leu	Trp		
		35					40					45					
Arg	Leu	Val	Leu	Ala	Gln	Arg	Trp	Met	Glu	His	Leu	Lys	Thr	Val	Ala		
		50				55					60						
Gly	Ser	Lys	Met	Gln	Gly	Leu	Leu	Glu	Arg	Val	Asn	Thr	Glu	Ile	His		
65					70					75					80		
Phe	Val	Thr	Lys	Cys	Ala	Phe	Gln	Pro	Pro	Pro	Ser	Cys	Leu	Arg	Phe		
				85				90						95			
Val	Gln	Thr	Asn	Ile	Ser	Arg	Leu	Leu	Gln	Glu	Thr	Ser	Glu	Gln	Leu		
			100					105					110				
Val	Ala	Leu	Lys	Pro	Trp	Ile	Thr	Arg	Gln	Asn	Phe	Ser	Arg	Cys	Leu		
		115					120						125				
Glu	Leu	Gln	Cys	Gln	Pro	Asp	Ser	Ser	Thr	Leu	Pro	Pro	Pro	Trp	Ser		
		130				135					140						
Pro	Arg	Pro	Leu	Glu	Ala	Thr	Ala	Pro	Thr	Ala	Pro	Gln	Pro	Pro	Leu		
145					150					155					160		
Leu	Leu	Leu	Leu	Leu	Leu	Pro	Val	Gly	Leu	Leu	Leu	Leu	Ala	Ala	Ala		
				165				170						175			
Trp	Cys	Leu	His	Trp	Gln	Arg	Thr	Arg	Arg	Arg	Thr	Pro	Arg	Pro	Gly		
			180					185					190				
Glu	Gln	Val	Pro	Pro	Val	Pro	Ser	Pro	Gln	Asp	Leu	Leu	Leu	Val	Glu		
		195					200					205					

His

<210> 416  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 416  
 Thr Gln Asp Cys Ser Phe Gln His Ser Pro Ile Ser Ser Asp Phe Ala  
 1 5 10 15  
 Val Lys Ile Arg Glu Leu Ser Asp Tyr Leu Leu Gln Asp Tyr Pro Val  
 20 25 30  
 Thr Val Ala Ser Asn Leu Gln Asp Glu Glu Leu Cys Gly Gly Leu Trp  
 35 40 45  
 Arg Leu Val Leu Ala Gln Arg Trp Met Glu Gln Leu Lys Thr Val Ala  
 50 55 60  
 Gly Ser Lys Met Gln Gly Leu Leu Glu Arg Val Asn Thr Glu Ile His  
 65 70 75 80  
 Phe Val Thr Lys Cys Ala Phe Gln Pro Pro Pro Ser Cys Leu Arg Phe  
 85 90 95  
 Val Gln Thr Asn Ile Ser Arg Leu Leu Gln Glu Thr Ser Glu Gln Leu  
 100 105 110  
 Val Ala Leu Lys Pro Trp Ile Thr Arg Gln Asn Phe Ser Arg Cys Leu  
 115 120 125  
 Glu Leu Gln Cys Gln Pro Asp Ser Ser Thr Leu Pro Pro Pro Trp Ser  
 130 135 140  
 Pro Arg Pro Leu Glu Ala Thr Ala Pro Thr Ala Pro Gln Pro Pro Leu  
 145 150 155 160  
 Leu Leu Leu Leu Leu Leu Pro Val Gly Leu Leu Leu Leu Ala Ala Ala  
 165 170 175  
 Trp Cys Leu His Trp Gln Arg Thr Arg Arg Arg Thr Pro Arg Pro Gly  
 180 185 190  
 Glu Gln Val Pro Pro Val Pro Ser Pro Gln Asp Leu Leu Leu Val Glu  
 195 200 205  
 His

<210> 417  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 417  
 Thr Gln Asp Cys Ser Phe Gln His Ser Pro Ile Ser Ser Asp Phe Ala  
 1 5 10 15  
 Val Lys Ile Arg Glu Leu Ser Asp Tyr Leu Leu Gln Asp Tyr Pro Val  
 20 25 30  
 Thr Val Ala Ser Asn Leu Gln Asp Glu Glu Leu Cys Gly Gly Leu Trp  
 35 40 45  
 Arg Leu Val Leu Ala Gln Arg Trp Met Glu Arg Leu Gln Thr Val Ala  
 50 55 60  
 Gly Ser Lys Met Gln Gly Leu Leu Glu Arg Val Asn Thr Glu Ile His  
 65 70 75 80  
 Phe Val Thr Lys Cys Ala Phe Gln Pro Pro Pro Ser Cys Leu Arg Phe  
 85 90 95  
 Val Gln Thr Asn Ile Ser Arg Leu Leu Gln Glu Thr Ser Glu Gln Leu  
 100 105 110  
 Val Ala Leu Lys Pro Trp Ile Thr Arg Gln Asn Phe Ser Arg Cys Leu  
 115 120 125  
 Glu Leu Gln Cys Gln Pro Asp Ser Ser Thr Leu Pro Pro Pro Trp Ser  
 130 135 140  
 Pro Arg Pro Leu Glu Ala Thr Ala Pro Thr Ala Pro Gln Pro Pro Leu  
 145 150 155 160  
 Leu Leu Leu Leu Leu Leu Pro Val Gly Leu Leu Leu Leu Ala Ala Ala  
 165 170 175



Trp Cys Leu His Trp Arg Thr Arg Arg Arg Thr Pro Arg Gly  
 180 185 190  
 Glu Gln Val Pro Pro Val Pro Ser Pro Gln Asp Leu Leu Leu Val Glu  
 195 200 205  
 His

<210> 418  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 418  
 Thr Gln Asp Cys Ser Phe Gln His Ser Pro Ile Ser Ser Asp Phe Ala  
 1 5 10 15  
 Val Lys Ile Arg Glu Leu Ser Asp Tyr Leu Leu Gln Asp Tyr Pro Val  
 20 25 30  
 Thr Val Ala Ser Asn Leu Gln Asp Glu Glu Leu Cys Gly Gly Leu Trp  
 35 40 45  
 Arg Leu Val Leu Ala Gln Arg Trp Met Glu Arg Leu Asn Thr Val Ala  
 50 55 60  
 Gly Ser Lys Met Gln Gly Leu Leu Glu Arg Val Asn Thr Glu Ile His  
 65 70 75 80  
 Phe Val Thr Lys Cys Ala Phe Gln Pro Pro Ser Cys Leu Arg Phe  
 85 90 95  
 Val Gln Thr Asn Ile Ser Arg Leu Leu Gln Glu Thr Ser Glu Gln Leu  
 100 105 110  
 Val Ala Leu Lys Pro Trp Ile Thr Arg Gln Asn Phe Ser Arg Cys Leu  
 115 120 125  
 Glu Leu Gln Cys Gln Pro Asp Ser Ser Thr Leu Pro Pro Trp Ser  
 130 135 140  
 Pro Arg Pro Leu Glu Ala Thr Ala Pro Thr Ala Pro Gln Pro Pro Leu  
 145 150 155 160  
 Leu Leu Leu Leu Leu Leu Pro Val Gly Leu Leu Leu Leu Ala Ala Ala  
 165 170 175  
 Trp Cys Leu His Trp Gln Arg Thr Arg Arg Arg Thr Pro Arg Pro Gly  
 180 185 190  
 Glu Gln Val Pro Pro Val Pro Ser Pro Gln Asp Leu Leu Leu Val Glu  
 195 200 205  
 His

<210> 419  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 419  
 Thr Gln Asp Cys Ser Phe Gln His Ser Pro Ile Ser Ser Asp Phe Ala  
 1 5 10 15  
 Val Lys Ile Arg Glu Leu Ser Asp Tyr Leu Leu Gln Asp Tyr Pro Val  
 20 25 30  
 Thr Val Ala Ser Asn Leu Gln Asp Glu Glu Leu Cys Gly Gly Leu Trp  
 35 40 45  
 Arg Leu Val Leu Ala Gln Arg Trp Met Glu Arg Leu Lys Thr Val Ala  
 50 55 60  
 Gly Ser Lys Met Gln Gly Leu Leu Glu Arg Val Asn Thr Glu Ile His  
 65 70 75 80  
 Phe Val Thr Lys Cys Ala Phe Gln Ser Pro Pro Ser Cys Leu Arg Phe  
 85 90 95  
 Val Gln Thr Asn Ile Ser Arg Leu Leu Gln Glu Thr Ser Glu Gln Leu  
 100 105 110  
 Val Ala Leu Lys Pro Trp Ile Thr Arg Gln Asn Phe Ser Arg Cys Leu

115						120						125			
Glu	Leu	Gln	Cys	Gln	Pro	Asp	Ser	Ser	Thr	Leu	Pro	Pro	Pro	Trp	Ser
130						135					140				
Pro	Arg	Pro	Leu	Glu	Ala	Thr	Ala	Pro	Thr	Ala	Pro	Gln	Pro	Pro	Leu
145					150					155					160
Leu	Leu	Leu	Leu	Leu	Leu	Pro	Val	Gly	Leu	Leu	Leu	Leu	Ala	Ala	Ala
				165					170					175	
Trp	Cys	Leu	His	Trp	Gln	Arg	Thr	Arg	Arg	Arg	Thr	Pro	Arg	Pro	Gly
			180					185					190		
Glu	Gln	Val	Pro	Pro	Val	Pro	Ser	Pro	Gln	Asp	Leu	Leu	Leu	Val	Glu
		195					200					205			

His

<210> 420  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 420															
Thr	Gln	Asp	Cys	Ser	Phe	Gln	His	Ser	Pro	Ile	Ser	Ser	Asp	Phe	Ala
1				5					10					15	
Val	Lys	Ile	Arg	Glu	Leu	Ser	Asp	Tyr	Leu	Leu	Gln	Asp	Tyr	Pro	Val
		20						25					30		
Thr	Val	Ala	Ser	Asn	Leu	Gln	Asp	Glu	Glu	Leu	Cys	Gly	Gly	Leu	Trp
	35					40						45			
Arg	Leu	Val	Leu	Ala	Gln	Arg	Trp	Met	Glu	Arg	Leu	Lys	Thr	Val	Ala
	50				55						60				
Gly	Ser	Lys	Met	Gln	Gly	Leu	Leu	Glu	Arg	Val	Asn	Thr	Glu	Ile	His
65				70					75					80	
Phe	Val	Thr	Lys	Cys	Ala	Phe	Gln	Ala	Pro	Pro	Ser	Cys	Leu	Arg	Phe
			85						90					95	
Val	Gln	Thr	Asn	Ile	Ser	Arg	Leu	Leu	Gln	Glu	Thr	Ser	Glu	Gln	Leu
		100						105					110		
Val	Ala	Leu	Lys	Pro	Trp	Ile	Thr	Arg	Gln	Asn	Phe	Ser	Arg	Cys	Leu
	115						120					125			
Glu	Leu	Gln	Cys	Gln	Pro	Asp	Ser	Ser	Thr	Leu	Pro	Pro	Pro	Trp	Ser
	130					135					140				
Pro	Arg	Pro	Leu	Glu	Ala	Thr	Ala	Pro	Thr	Ala	Pro	Gln	Pro	Pro	Leu
145					150					155					160
Leu	Leu	Leu	Leu	Leu	Leu	Pro	Val	Gly	Leu	Leu	Leu	Leu	Ala	Ala	Ala
			165						170					175	
Trp	Cys	Leu	His	Trp	Gln	Arg	Thr	Arg	Arg	Arg	Thr	Pro	Arg	Pro	Gly
		180						185					190		
Glu	Gln	Val	Pro	Pro	Val	Pro	Ser	Pro	Gln	Asp	Leu	Leu	Leu	Val	Glu
		195					200					205			

His

<210> 421  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 421															
Thr	Gln	Asp	Cys	Ser	Phe	Gln	His	Ser	Pro	Ile	Ser	Ser	Asp	Phe	Ala
1				5					10					15	
Val	Lys	Ile	Arg	Glu	Leu	Ser	Asp	Tyr	Leu	Leu	Gln	Asp	Tyr	Pro	Val
		20						25					30		
Thr	Val	Ala	Ser	Asn	Leu	Gln	Asp	Glu	Glu	Leu	Cys	Gly	Gly	Leu	Trp
	35					40						45			
Arg	Leu	Val	Leu	Ala	Gln	Arg	Trp	Met	Glu	Arg	Leu	Lys	Thr	Val	Ala
	50					55					60				

Gly	Ser	Lys	Met	Gln	Leu	Leu	Glu	Arg	Val	Asn	Thr	Glu	His
65				70					75				80
Phe	Val	Thr	Lys	Cys	Ala	Phe	Gln	Pro	Ser	Pro	Ser	Cys	Leu
			85					90					95
Val	Gln	Thr	Asn	Ile	Ser	Arg	Leu	Leu	Gln	Glu	Thr	Ser	Glu
			100					105					110
Val	Ala	Leu	Lys	Pro	Trp	Ile	Thr	Arg	Gln	Asn	Phe	Ser	Arg
		115					120					125	
Glu	Leu	Gln	Cys	Gln	Pro	Asp	Ser	Ser	Thr	Leu	Pro	Pro	Pro
		130				135					140		
Pro	Arg	Pro	Leu	Glu	Ala	Thr	Ala	Pro	Thr	Ala	Pro	Gln	Pro
		145			150					155			160
Leu	Leu	Leu	Leu	Leu	Leu	Pro	Val	Gly	Leu	Leu	Leu	Ala	Ala
			165					170					175
Trp	Cys	Leu	His	Trp	Gln	Arg	Thr	Arg	Arg	Arg	Thr	Pro	Arg
			180					185				190	
Glu	Gln	Val	Pro	Pro	Val	Pro	Ser	Pro	Gln	Asp	Leu	Leu	Val
		195					200					205	

His

<210> 422  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

Thr	Gln	Asp	Cys	Ser	Phe	Gln	His	Ser	Pro	Ile	Ser	Ser	Asp	Phe	Ala
1			5						10					15	
Val	Lys	Ile	Arg	Glu	Leu	Ser	Asp	Tyr	Leu	Leu	Gln	Asp	Tyr	Pro	Val
			20					25					30		
Thr	Val	Ala	Ser	Asn	Leu	Gln	Asp	Glu	Glu	Leu	Cys	Gly	Gly	Leu	Trp
		35					40					45			
Arg	Leu	Val	Leu	Ala	Gln	Arg	Trp	Met	Glu	Arg	Leu	Lys	Thr	Val	Ala
		50				55					60				
Gly	Ser	Lys	Met	Gln	Gly	Leu	Leu	Glu	Arg	Val	Asn	Thr	Glu	Ile	His
65				70						75					80
Phe	Val	Thr	Lys	Cys	Ala	Phe	Gln	Pro	Ala	Pro	Ser	Cys	Leu	Arg	Phe
			85					90						95	
Val	Gln	Thr	Asn	Ile	Ser	Arg	Leu	Leu	Gln	Glu	Thr	Ser	Glu	Gln	Leu
			100					105					110		
Val	Ala	Leu	Lys	Pro	Trp	Ile	Thr	Arg	Gln	Asn	Phe	Ser	Arg	Cys	Leu
		115					120					125			
Glu	Leu	Gln	Cys	Gln	Pro	Asp	Ser	Ser	Thr	Leu	Pro	Pro	Pro	Trp	Ser
		130				135					140				
Pro	Arg	Pro	Leu	Glu	Ala	Thr	Ala	Pro	Thr	Ala	Pro	Gln	Pro	Pro	Leu
		145			150					155					160
Leu	Leu	Leu	Leu	Leu	Leu	Pro	Val	Gly	Leu	Leu	Leu	Leu	Ala	Ala	Ala
			165					170						175	
Trp	Cys	Leu	His	Trp	Gln	Arg	Thr	Arg	Arg	Arg	Thr	Pro	Arg	Pro	Gly
			180					185					190		
Glu	Gln	Val	Pro	Pro	Val	Pro	Ser	Pro	Gln	Asp	Leu	Leu	Leu	Val	Glu
		195					200						205		

His

<210> 423  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

Thr	Gln	Asp	Cys	Ser	Phe	Gln	His	Ser	Pro	Ile	Ser	Ser	Asp	Phe	Ala
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

1	5	10																	
Val	Lys	Ile	Arg	Glu	Leu	Ser	Asp	Tyr	Leu	Leu	Gln	Asp	Tyr	Pro	Val				
			20					25					30						
Thr	Val	Ala	Ser	Asn	Leu	Gln	Asp	Glu	Glu	Leu	Cys	Gly	Gly	Leu	Trp				
		35					40					45							
Arg	Leu	Val	Leu	Ala	Gln	Arg	Trp	Met	Glu	Arg	Leu	Lys	Thr	Val	Ala				
		50				55					60								
Gly	Ser	Lys	Met	Gln	Gly	Leu	Leu	Glu	Arg	Val	Asn	Thr	Glu	Ile	His				
65				70					75					80					
Phe	Val	Thr	Lys	Cys	Ala	Phe	Gln	Pro	Pro	Ser	Ser	Cys	Leu	Arg	Phe				
			85					90					95						
Val	Gln	Thr	Asn	Ile	Ser	Arg	Leu	Leu	Gln	Glu	Thr	Ser	Glu	Gln	Leu				
		100					105					110							
Val	Ala	Leu	Lys	Pro	Trp	Ile	Thr	Arg	Gln	Asn	Phe	Ser	Arg	Cys	Leu				
		115					120					125							
Glu	Leu	Gln	Cys	Gln	Pro	Asp	Ser	Ser	Thr	Leu	Pro	Pro	Pro	Trp	Ser				
		130				135					140								
Pro	Arg	Pro	Leu	Glu	Ala	Thr	Ala	Pro	Thr	Ala	Pro	Gln	Pro	Pro	Leu				
145				150					155						160				
Leu	Leu	Leu	Leu	Leu	Leu	Pro	Val	Gly	Leu	Leu	Leu	Leu	Ala	Ala	Ala				
			165					170					175						
Trp	Cys	Leu	His	Trp	Gln	Arg	Thr	Arg	Arg	Arg	Thr	Pro	Arg	Pro	Gly				
		180					185					190							
Glu	Gln	Val	Pro	Pro	Val	Pro	Ser	Pro	Gln	Asp	Leu	Leu	Leu	Val	Glu				
		195				200					205								

His

<210> 424  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 424																			
Thr	Gln	Asp	Cys	Ser	Phe	Gln	His	Ser	Pro	Ile	Ser	Ser	Asp	Phe	Ala				
1			5					10					15						
Val	Lys	Ile	Arg	Glu	Leu	Ser	Asp	Tyr	Leu	Leu	Gln	Asp	Tyr	Pro	Val				
			20					25					30						
Thr	Val	Ala	Ser	Asn	Leu	Gln	Asp	Glu	Glu	Leu	Cys	Gly	Gly	Leu	Trp				
		35					40					45							
Arg	Leu	Val	Leu	Ala	Gln	Arg	Trp	Met	Glu	Arg	Leu	Lys	Thr	Val	Ala				
		50				55					60								
Gly	Ser	Lys	Met	Gln	Gly	Leu	Leu	Glu	Arg	Val	Asn	Thr	Glu	Ile	His				
65				70					75					80					
Phe	Val	Thr	Lys	Cys	Ala	Phe	Gln	Pro	Pro	Ala	Ser	Cys	Leu	Arg	Phe				
			85					90					95						
Val	Gln	Thr	Asn	Ile	Ser	Arg	Leu	Leu	Gln	Glu	Thr	Ser	Glu	Gln	Leu				
		100					105					110							
Val	Ala	Leu	Lys	Pro	Trp	Ile	Thr	Arg	Gln	Asn	Phe	Ser	Arg	Cys	Leu				
		115					120					125							
Glu	Leu	Gln	Cys	Gln	Pro	Asp	Ser	Ser	Thr	Leu	Pro	Pro	Pro	Trp	Ser				
		130				135					140								
Pro	Arg	Pro	Leu	Glu	Ala	Thr	Ala	Pro	Thr	Ala	Pro	Gln	Pro	Pro	Leu				
145				150					155						160				
Leu	Leu	Leu	Leu	Leu	Leu	Pro	Val	Gly	Leu	Leu	Leu	Leu	Ala	Ala	Ala				
			165					170					175						
Trp	Cys	Leu	His	Trp	Gln	Arg	Thr	Arg	Arg	Arg	Thr	Pro	Arg	Pro	Gly				
		180					185					190							
Glu	Gln	Val	Pro	Pro	Val	Pro	Ser	Pro	Gln	Asp	Leu	Leu	Leu	Val	Glu				
		195				200					205								

His

<210> 425  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 425  
 Thr Gln Asp Cys Ser Phe Gln His Ser Pro Ile Ser Ser Asp Phe Ala  
 1 5 10 15  
 Val Lys Ile Arg Glu Leu Ser Asp Tyr Leu Leu Gln Asp Tyr Pro Val  
 20 25 30  
 Thr Val Ala Ser Asn Leu Gln Asp Glu Glu Leu Cys Gly Gly Leu Trp  
 35 40 45  
 Arg Leu Val Leu Ala Gln Arg Trp Met Glu Arg Leu Lys Thr Val Ala  
 50 55 60  
 Gly Ser Lys Met Gln Gly Leu Leu Glu Arg Val Asn Thr Glu Ile His  
 65 70 75 80  
 Phe Val Thr Lys Cys Ala Phe Gln Pro Pro Pro Ser Cys Leu His Phe  
 85 90 95  
 Val Gln Thr Asn Ile Ser Arg Leu Leu Gln Glu Thr Ser Glu Gln Leu  
 100 105 110  
 Val Ala Leu Lys Pro Trp Ile Thr Arg Gln Asn Phe Ser Arg Cys Leu  
 115 120 125  
 Glu Leu Gln Cys Gln Pro Asp Ser Ser Thr Leu Pro Pro Pro Trp Ser  
 130 135 140  
 Pro Arg Pro Leu Glu Ala Thr Ala Pro Thr Ala Pro Gln Pro Pro Leu  
 145 150 155 160  
 Leu Leu Leu Leu Leu Leu Pro Val Gly Leu Leu Leu Leu Ala Ala Ala  
 165 170 175  
 Trp Cys Leu His Trp Gln Arg Thr Arg Arg Arg Thr Pro Arg Pro Gly  
 180 185 190  
 Glu Gln Val Pro Pro Val Pro Ser Pro Gln Asp Leu Leu Val Glu  
 195 200 205  
 His

<210> 426  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 426  
 Thr Gln Asp Cys Ser Phe Gln His Ser Pro Ile Ser Ser Asp Phe Ala  
 1 5 10 15  
 Val Lys Ile Arg Glu Leu Ser Asp Tyr Leu Leu Gln Asp Tyr Pro Val  
 20 25 30  
 Thr Val Ala Ser Asn Leu Gln Asp Glu Glu Leu Cys Gly Gly Leu Trp  
 35 40 45  
 Arg Leu Val Leu Ala Gln Arg Trp Met Glu Arg Leu Lys Thr Val Ala  
 50 55 60  
 Gly Ser Lys Met Gln Gly Leu Leu Glu Arg Val Asn Thr Glu Ile His  
 65 70 75 80  
 Phe Val Thr Lys Cys Ala Phe Gln Pro Pro Pro Ser Cys Leu Gln Phe  
 85 90 95  
 Val Gln Thr Asn Ile Ser Arg Leu Leu Gln Glu Thr Ser Glu Gln Leu  
 100 105 110  
 Val Ala Leu Lys Pro Trp Ile Thr Arg Gln Asn Phe Ser Arg Cys Leu  
 115 120 125  
 Glu Leu Gln Cys Gln Pro Asp Ser Ser Thr Leu Pro Pro Pro Trp Ser  
 130 135 140  
 Pro Arg Pro Leu Glu Ala Thr Ala Pro Thr Ala Pro Gln Pro Pro Leu  
 145 150 155 160  
 Leu Leu Leu Leu Leu Leu Pro Val Gly Leu Leu Leu Leu Ala Ala Ala  
 165 170 175

Trp Cys Leu His Trp Arg Thr Arg Arg Arg Thr Pro Arg Gly  
 180 185 190  
 Glu Gln Val Pro Pro Val Pro Ser Pro Gln Asp Leu Leu Leu Val Glu  
 195 200 205  
 His

<210> 427  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 427  
 Thr Gln Asp Cys Ser Phe Gln His Ser Pro Ile Ser Ser Asp Phe Ala  
 1 5 10 15  
 Val Lys Ile Arg Glu Leu Ser Asp Tyr Leu Leu Gln Asp Tyr Pro Val  
 20 25 30  
 Thr Val Ala Ser Asn Leu Gln Asp Glu Glu Leu Cys Gly Gly Leu Trp  
 35 40 45  
 Arg Leu Val Leu Ala Gln Arg Trp Met Glu Arg Leu Lys Thr Val Ala  
 50 55 60  
 Gly Ser Lys Met Gln Gly Leu Leu Glu Arg Val Asn Thr Glu Ile His  
 65 70 75 80  
 Phe Val Thr Lys Cys Ala Phe Gln Pro Pro Pro Ser Cys Leu Arg Ile  
 85 90 95  
 Val Gln Thr Asn Ile Ser Arg Leu Leu Gln Glu Thr Ser Glu Gln Leu  
 100 105 110  
 Val Ala Leu Lys Pro Trp Ile Thr Arg Gln Asn Phe Ser Arg Cys Leu  
 115 120 125  
 Glu Leu Gln Cys Gln Pro Asp Ser Ser Thr Leu Pro Pro Pro Trp Ser  
 130 135 140  
 Pro Arg Pro Leu Glu Ala Thr Ala Pro Thr Ala Pro Gln Pro Pro Leu  
 145 150 155 160  
 Leu Leu Leu Leu Leu Leu Pro Val Gly Leu Leu Leu Leu Ala Ala Ala  
 165 170 175  
 Trp Cys Leu His Trp Gln Arg Thr Arg Arg Arg Thr Pro Arg Pro Gly  
 180 185 190  
 Glu Gln Val Pro Pro Val Pro Ser Pro Gln Asp Leu Leu Leu Val Glu  
 195 200 205  
 His

<210> 428  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 428  
 Thr Gln Asp Cys Ser Phe Gln His Ser Pro Ile Ser Ser Asp Phe Ala  
 1 5 10 15  
 Val Lys Ile Arg Glu Leu Ser Asp Tyr Leu Leu Gln Asp Tyr Pro Val  
 20 25 30  
 Thr Val Ala Ser Asn Leu Gln Asp Glu Glu Leu Cys Gly Gly Leu Trp  
 35 40 45  
 Arg Leu Val Leu Ala Gln Arg Trp Met Glu Arg Leu Lys Thr Val Ala  
 50 55 60  
 Gly Ser Lys Met Gln Gly Leu Leu Glu Arg Val Asn Thr Glu Ile His  
 65 70 75 80  
 Phe Val Thr Lys Cys Ala Phe Gln Pro Pro Pro Ser Cys Leu Arg Val  
 85 90 95  
 Val Gln Thr Asn Ile Ser Arg Leu Leu Gln Glu Thr Ser Glu Gln Leu  
 100 105 110  
 Val Ala Leu Lys Pro Trp Ile Thr Arg Gln Asn Phe Ser Arg Cys Leu



<210> 431  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 431  
 Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His  
 1 5 10 15  
 Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys  
 20 25 30  
 Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe His Met Pro Lys  
 35 40 45  
 Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Leu Lys  
 50 55 60  
 Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu  
 65 70 75 80  
 Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu  
 85 90 95  
 Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala  
 100 105 110  
 Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile  
 115 120 125  
 Ile Ser Thr Leu Thr  
 130

<210> 432  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 432  
 Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His  
 1 5 10 15  
 Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys  
 20 25 30  
 Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Ile Met Pro Lys  
 35 40 45  
 Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys  
 50 55 60  
 Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu  
 65 70 75 80  
 Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu  
 85 90 95  
 Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala  
 100 105 110  
 Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile  
 115 120 125  
 Ile Ser Thr Leu Thr  
 130

<210> 433  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 433  
 Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His  
 1 5 10 15  
 Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys  
 20 25 30  
 Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Gln  
 35 40 45



Lys Ala Thr Glu Leu      His Leu Gln Cys Leu Glu Glu Glu      Lys  
     50                      55                      60  
 Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu  
 65                      70                      75                      80  
 Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu  
                     85                      90                      95  
 Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala  
                     100                      105                      110  
 Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile  
                     115                      120                      125  
 Ile Ser Thr Leu Thr  
     130

<210> 434  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 434  
 Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His  
     1                      5                      10                      15  
 Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys  
                     20                      25                      30  
 Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Asn  
                     35                      40                      45  
 Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys  
                     50                      55                      60  
 Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu  
 65                      70                      75                      80  
 Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu  
                     85                      90                      95  
 Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala  
                     100                      105                      110  
 Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile  
                     115                      120                      125  
 Ile Ser Thr Leu Thr  
     130

<210> 435  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 435  
 Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His  
     1                      5                      10                      15  
 Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys  
                     20                      25                      30  
 Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys  
                     35                      40                      45  
 Gln Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys  
                     50                      55                      60  
 Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu  
 65                      70                      75                      80  
 Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu  
                     85                      90                      95  
 Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala  
                     100                      105                      110  
 Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile  
                     115                      120                      125  
 Ile Ser Thr Leu Thr  
     130

<210> 436  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 436  
 Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His  
 1 5 10 15  
 Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys  
 20 25 30  
 Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys  
 35 40 45  
 Asn Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Leu Lys  
 50 55 60  
 Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu  
 65 70 75 80  
 Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu  
 85 90 95  
 Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala  
 100 105 110  
 Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile  
 115 120 125  
 Ile Ser Thr Leu Thr  
 130

<210> 437  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 437  
 Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His  
 1 5 10 15  
 Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys  
 20 25 30  
 Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys  
 35 40 45  
 Lys Ala Thr Gln Leu Lys His Leu Gln Cys Leu Glu Glu Leu Lys  
 50 55 60  
 Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu  
 65 70 75 80  
 Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu  
 85 90 95  
 Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala  
 100 105 110  
 Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile  
 115 120 125  
 Ile Ser Thr Leu Thr  
 130

<210> 438  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 438  
 Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His  
 1 5 10 15  
 Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys  
 20 25 30  
 Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys  
 35 40 45  
 Lys Ala Thr Asn Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys

50                      55                      60  
 Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu  
 65                      70                      75                      80  
 Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu  
                     85                      90                      95  
 Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala  
                     100                      105                      110  
 Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile  
                     115                      120                      125  
 Ile Ser Thr Leu Thr  
                     130

<210> 439  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 439  
 Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His  
 1                      5                      10                      15  
 Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys  
                     20                      25                      30  
 Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys  
                     35                      40                      45  
 Lys Ala Thr His Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys  
                     50                      55                      60  
 Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu  
 65                      70                      75                      80  
 Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu  
                     85                      90                      95  
 Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala  
                     100                      105                      110  
 Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile  
                     115                      120                      125  
 Ile Ser Thr Leu Thr  
                     130

<210> 440  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 440  
 Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His  
 1                      5                      10                      15  
 Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys  
                     20                      25                      30  
 Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys  
                     35                      40                      45  
 Lys Ala Thr Glu Val Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys  
                     50                      55                      60  
 Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu  
 65                      70                      75                      80  
 Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu  
                     85                      90                      95  
 Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala  
                     100                      105                      110  
 Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile  
                     115                      120                      125  
 Ile Ser Thr Leu Thr  
                     130

<210> 441

<211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 441

Ala	Pro	Thr	Ser	Ser	Ser	Thr	Lys	Lys	Thr	Gln	Leu	Gln	Leu	Glu	His
1				5					10					15	
Leu	Leu	Leu	Asp	Leu	Gln	Met	Ile	Leu	Asn	Gly	Ile	Asn	Asn	Tyr	Lys
			20					25					30		
Asn	Pro	Lys	Leu	Thr	Arg	Met	Leu	Thr	Phe	Lys	Phe	Tyr	Met	Pro	Lys
		35					40					45			
Lys	Ala	Thr	Glu	Ile	Lys	His	Leu	Gln	Cys	Leu	Glu	Glu	Glu	Leu	Lys
	50					55					60				
Pro	Leu	Glu	Glu	Val	Leu	Asn	Leu	Ala	Gln	Ser	Lys	Asn	Phe	His	Leu
65					70					75					80
Arg	Pro	Arg	Asp	Leu	Ile	Ser	Asn	Ile	Asn	Val	Ile	Val	Leu	Glu	Leu
			85						90					95	
Lys	Gly	Ser	Glu	Thr	Thr	Phe	Met	Cys	Glu	Tyr	Ala	Asp	Glu	Thr	Ala
			100					105					110		
Thr	Ile	Val	Glu	Phe	Leu	Asn	Arg	Trp	Ile	Thr	Phe	Cys	Gln	Ser	Ile
		115					120						125		
Ile	Ser	Thr	Leu	Thr											
			130												

<210> 442  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 442

Ala	Pro	Thr	Ser	Ser	Ser	Thr	Lys	Lys	Thr	Gln	Leu	Gln	Leu	Glu	His
1				5					10					15	
Leu	Leu	Leu	Asp	Leu	Gln	Met	Ile	Leu	Asn	Gly	Ile	Asn	Asn	Tyr	Lys
			20					25					30		
Asn	Pro	Lys	Leu	Thr	Arg	Met	Leu	Thr	Phe	Lys	Phe	Tyr	Met	Pro	Lys
		35					40					45			
Lys	Ala	Thr	Glu	Leu	Lys	His	Leu	Gln	Cys	Leu	Gln	Glu	Glu	Leu	Lys
	50					55					60				
Pro	Leu	Glu	Glu	Val	Leu	Asn	Leu	Ala	Gln	Ser	Lys	Asn	Phe	His	Leu
65					70					75					80
Arg	Pro	Arg	Asp	Leu	Ile	Ser	Asn	Ile	Asn	Val	Ile	Val	Leu	Glu	Leu
			85						90					95	
Lys	Gly	Ser	Glu	Thr	Thr	Phe	Met	Cys	Glu	Tyr	Ala	Asp	Glu	Thr	Ala
			100					105					110		
Thr	Ile	Val	Glu	Phe	Leu	Asn	Arg	Trp	Ile	Thr	Phe	Cys	Gln	Ser	Ile
		115					120						125		
Ile	Ser	Thr	Leu	Thr											
			130												

<210> 443  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 443

Ala	Pro	Thr	Ser	Ser	Ser	Thr	Lys	Lys	Thr	Gln	Leu	Gln	Leu	Glu	His
1				5					10					15	
Leu	Leu	Leu	Asp	Leu	Gln	Met	Ile	Leu	Asn	Gly	Ile	Asn	Asn	Tyr	Lys
			20					25					30		
Asn	Pro	Lys	Leu	Thr	Arg	Met	Leu	Thr	Phe	Lys	Phe	Tyr	Met	Pro	Lys
		35					40					45			
Lys	Ala	Thr	Glu	Leu	Lys	His	Leu	Gln	Cys	Leu	Asn	Glu	Glu	Leu	Lys
	50					55					60				

Pro Leu Glu Glu Val Asn Leu Ala Gln Ser Lys Asn Phe Leu  
65 70 75 80  
Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu  
85 90 95  
Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala  
100 105 110  
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile  
115 120 125  
Ile Ser Thr Leu Thr  
130

<210> 444  
<211> 133  
<212> PRT  
<213> Homo sapiens

<400> 444  
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His  
1 5 10 15  
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys  
20 25 30  
Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys  
35 40 45  
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu His Glu Glu Leu Lys  
50 55 60  
Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu  
65 70 75 80  
Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu  
85 90 95  
Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala  
100 105 110  
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile  
115 120 125  
Ile Ser Thr Leu Thr  
130

<210> 445  
<211> 133  
<212> PRT  
<213> Homo sapiens

<400> 445  
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His  
1 5 10 15  
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys  
20 25 30  
Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys  
35 40 45  
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Gln Glu Leu Lys  
50 55 60  
Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu  
65 70 75 80  
Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu  
85 90 95  
Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala  
100 105 110  
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile  
115 120 125  
Ile Ser Thr Leu Thr  
130

<210> 446  
<211> 133

<212> PRT  
<213> Homo sapiens

<400> 446

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
 1          5          10          15
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
      20          25          30
Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
      35          40          45
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Asn Glu Leu Lys
      50          55          60
Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu
      65          70          75          80
Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
      85          90          95
Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
      100          105          110
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile
      115          120          125
Ile Ser Thr Leu Thr
      130
```

<210> 447

<211> 133

<212> PRT

<213> Homo sapiens

<400> 447

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
 1          5          10          15
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
      20          25          30
Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
      35          40          45
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu His Glu Leu Lys
      50          55          60
Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu
      65          70          75          80
Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu
      85          90          95
Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala
      100          105          110
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile
      115          120          125
Ile Ser Thr Leu Thr
      130
```

<210> 448

<211> 133

<212> PRT

<213> Homo sapiens

<400> 448

```
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His
 1          5          10          15
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys
      20          25          30
Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys
      35          40          45
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Leu Lys
      50          55          60
Ser Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu
```

65	Arg	Pro	Arg	Asp	Leu	Ile	Ser	Asn	Ile	Asn	Val	Ile	Val	Leu	Glu	Leu	80
				85						90							95
	Lys	Gly	Ser	Glu	Thr	Thr	Phe	Met	Cys	Glu	Tyr	Ala	Asp	Glu	Thr	Ala	
			100						105							110	
	Thr	Ile	Val	Glu	Phe	Leu	Asn	Arg	Trp	Ile	Thr	Phe	Cys	Gln	Ser	Ile	
			115					120					125				
	Ile	Ser	Thr	Leu	Thr												
			130														

<210> 449  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 449	Ala	Pro	Thr	Ser	Ser	Ser	Thr	Lys	Lys	Thr	Gln	Leu	Gln	Leu	Glu	His
	1				5					10					15	
	Leu	Leu	Leu	Asp	Leu	Gln	Met	Ile	Leu	Asn	Gly	Ile	Asn	Asn	Tyr	Lys
			20						25					30		
	Asn	Pro	Lys	Leu	Thr	Arg	Met	Leu	Thr	Phe	Lys	Phe	Tyr	Met	Pro	Lys
			35					40					45			
	Lys	Ala	Thr	Glu	Leu	Lys	His	Leu	Gln	Cys	Leu	Glu	Glu	Glu	Leu	Lys
			50				55					60				
	Ala	Leu	Glu	Glu	Val	Leu	Asn	Leu	Ala	Gln	Ser	Lys	Asn	Phe	His	Leu
	65				70					75						80
	Arg	Pro	Arg	Asp	Leu	Ile	Ser	Asn	Ile	Asn	Val	Ile	Val	Leu	Glu	Leu
				85						90					95	
	Lys	Gly	Ser	Glu	Thr	Thr	Phe	Met	Cys	Glu	Tyr	Ala	Asp	Glu	Thr	Ala
			100						105						110	
	Thr	Ile	Val	Glu	Phe	Leu	Asn	Arg	Trp	Ile	Thr	Phe	Cys	Gln	Ser	Ile
			115					120					125			
	Ile	Ser	Thr	Leu	Thr											
			130													

<210> 450  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 450	Ala	Pro	Thr	Ser	Ser	Ser	Thr	Lys	Lys	Thr	Gln	Leu	Gln	Leu	Glu	His
	1				5					10					15	
	Leu	Leu	Leu	Asp	Leu	Gln	Met	Ile	Leu	Asn	Gly	Ile	Asn	Asn	Tyr	Lys
			20						25					30		
	Asn	Pro	Lys	Leu	Thr	Arg	Met	Leu	Thr	Phe	Lys	Phe	Tyr	Met	Pro	Lys
			35					40					45			
	Lys	Ala	Thr	Glu	Leu	Lys	His	Leu	Gln	Cys	Leu	Glu	Glu	Glu	Leu	Lys
			50				55					60				
	Pro	Leu	Gln	Glu	Val	Leu	Asn	Leu	Ala	Gln	Ser	Lys	Asn	Phe	His	Leu
	65				70					75						80
	Arg	Pro	Arg	Asp	Leu	Ile	Ser	Asn	Ile	Asn	Val	Ile	Val	Leu	Glu	Leu
				85						90					95	
	Lys	Gly	Ser	Glu	Thr	Thr	Phe	Met	Cys	Glu	Tyr	Ala	Asp	Glu	Thr	Ala
			100						105						110	
	Thr	Ile	Val	Glu	Phe	Leu	Asn	Arg	Trp	Ile	Thr	Phe	Cys	Gln	Ser	Ile
			115					120					125			
	Ile	Ser	Thr	Leu	Thr											
			130													

<210> 451  
 <211> 133  
 <212> PRT

[illegible]

<210> 452

<211> 133

<212> PRT

<213> Homo sapiens

<400> 452

[illegible]

<210> 453

<211> 133

<212> PRT

<213> Homo sapiens

<400> 453

Ala 1	Pro	Thr	Ser	Ser 5	Ser	Thr	Lys	Lys	Thr 10	Gln	Leu	Gln	Leu	Glu 15	His
Leu	Leu	Leu	Asp 20	Leu	Gln	Met	Ile	Leu 25	Asn	Gly	Ile	Asn	Asn 30	Tyr	Lys
Asn	Pro	Lys 35	Leu	Thr	Arg	Met	Leu 40	Thr	Phe	Lys	Phe	Tyr 45	Met	Pro	Lys
Lys	Ala	Thr	Glu	Leu	Lys	His 55	Leu	Gln	Cys	Leu	Glu 60	Glu	Glu	Leu	Lys
Pro 65	Leu	Glu	Gln	Val	Leu 70	Asn	Leu	Ala	Gln	Ser 75	Lys	Asn	Phe	His	Leu 80



Arg Pro Arg Asp Leu Ser Asn Ile Asn Val Ile Val Leu Leu  
85 90 95  
Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala  
100 105 110  
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile  
115 120 125  
Ile Ser Thr Leu Thr  
130

<210> 454  
<211> 133  
<212> PRT  
<213> Homo sapiens

<400> 454  
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His  
1 5 10 15  
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys  
20 25 30  
Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys  
35 40 45  
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys  
50 55 60  
Pro Leu Glu Asn Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu  
65 70 75 80  
Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu  
85 90 95  
Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala  
100 105 110  
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile  
115 120 125  
Ile Ser Thr Leu Thr  
130

<210> 455  
<211> 133  
<212> PRT  
<213> Homo sapiens

<400> 455  
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His  
1 5 10 15  
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys  
20 25 30  
Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys  
35 40 45  
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys  
50 55 60  
Pro Leu Glu His Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu  
65 70 75 80  
Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu  
85 90 95  
Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala  
100 105 110  
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile  
115 120 125  
Ile Ser Thr Leu Thr  
130

<210> 456  
<211> 133  
<212> PRT  
<213> Homo sapiens

[illegible]

<213> Homo sapiens

[illegible]

<213> Homo sapiens

Ala 1	Pro	Thr	Ser	Ser 5	Ser	Thr	Lys	Lys	Thr 10	Gln	Leu	Gln	Leu	Glu 15	His
Leu	Leu	Leu	Asp 20	Leu	Gln	Met	Ile	Leu 25	Asn	Gly	Ile	Asn	Asn 30	Tyr	Lys
Asn	Pro	Lys 35	Leu	Thr	Arg	Met	Leu 40	Thr	Phe	Lys	Phe	Tyr 45	Met	Pro	Lys
Lys 50	Ala	Thr	Glu	Leu	Lys	His 55	Leu	Gln	Cys	Leu	Glu 60	Glu	Glu	Leu	Lys
Pro 65	Leu	Glu	Glu	Val	Leu	Asn 70	Leu	Ala	Gln	Ser	Lys 75	Asn	Phe	His	Leu 80
Arg	Pro	Arg	Asp	Leu	Ile	Ser	Asn	Ile	Asn	Val	Ile	Val	Leu	Glu	Leu

Lys	Gly	Ser	Gln	85	Thr	Thr	Phe	Met	Cys	90	Glu	Tyr	Ala	Asp	Glu	Thr	Ala
			100						105						110		
Thr	Ile	Val	Glu	Phe	Leu	Asn	Arg	Trp	Ile	Thr	Phe	Cys	Gln	Ser	Ile		
		115					120					125					
Ile	Ser	Thr	Leu	Thr													
		130															

<210> 459  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

Ala	Pro	Thr	Ser	Ser	Ser	Thr	Lys	Lys	Thr	Gln	Leu	Gln	Leu	Glu	His		
1				5					10					15			
Leu	Leu	Leu	Asp	Leu	Gln	Met	Ile	Leu	Asn	Gly	Ile	Asn	Asn	Tyr	Lys		
		20						25					30				
Asn	Pro	Lys	Leu	Thr	Arg	Met	Leu	Thr	Phe	Lys	Phe	Tyr	Met	Pro	Lys		
		35					40					45					
Lys	Ala	Thr	Glu	Leu	Lys	His	Leu	Gln	Cys	Leu	Glu	Glu	Glu	Leu	Lys		
	50				55						60						
Pro	Leu	Glu	Glu	Val	Leu	Asn	Leu	Ala	Gln	Ser	Lys	Asn	Phe	His	Leu		
65				70					75						80		
Arg	Pro	Arg	Asp	Leu	Ile	Ser	Asn	Ile	Asn	Val	Ile	Val	Leu	Glu	Leu		
			85						90					95			
Lys	Gly	Ser	Asn	Thr	Thr	Phe	Met	Cys	Glu	Tyr	Ala	Asp	Glu	Thr	Ala		
		100					105						110				
Thr	Ile	Val	Glu	Phe	Leu	Asn	Arg	Trp	Ile	Thr	Phe	Cys	Gln	Ser	Ile		
		115					120					125					
Ile	Ser	Thr	Leu	Thr													
		130															

<210> 460  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

Ala	Pro	Thr	Ser	Ser	Ser	Thr	Lys	Lys	Thr	Gln	Leu	Gln	Leu	Glu	His		
1				5					10					15			
Leu	Leu	Leu	Asp	Leu	Gln	Met	Ile	Leu	Asn	Gly	Ile	Asn	Asn	Tyr	Lys		
		20						25					30				
Asn	Pro	Lys	Leu	Thr	Arg	Met	Leu	Thr	Phe	Lys	Phe	Tyr	Met	Pro	Lys		
		35					40					45					
Lys	Ala	Thr	Glu	Leu	Lys	His	Leu	Gln	Cys	Leu	Glu	Glu	Glu	Leu	Lys		
	50				55						60						
Pro	Leu	Glu	Glu	Val	Leu	Asn	Leu	Ala	Gln	Ser	Lys	Asn	Phe	His	Leu		
65				70					75						80		
Arg	Pro	Arg	Asp	Leu	Ile	Ser	Asn	Ile	Asn	Val	Ile	Val	Leu	Glu	Leu		
			85						90					95			
Lys	Gly	Ser	His	Thr	Thr	Phe	Met	Cys	Glu	Tyr	Ala	Asp	Glu	Thr	Ala		
		100					105						110				
Thr	Ile	Val	Glu	Phe	Leu	Asn	Arg	Trp	Ile	Thr	Phe	Cys	Gln	Ser	Ile		
		115					120					125					
Ile	Ser	Thr	Leu	Thr													
		130															

<210> 461  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 461

Ala	Pro	Thr	Ser	Ser	Ser	Thr	Lys	Lys	Thr	Gln	Leu	Gln	Leu	Glu	His
1				5					10					15	
Leu	Leu	Leu	Asp	Leu	Gln	Met	Ile	Leu	Asn	Gly	Ile	Asn	Asn	Tyr	Lys
			20				25						30		
Asn	Pro	Lys	Leu	Thr	Arg	Met	Leu	Thr	Phe	Lys	Phe	Tyr	Met	Pro	Lys
		35				40						45			
Lys	Ala	Thr	Glu	Leu	Lys	His	Leu	Gln	Cys	Leu	Glu	Glu	Glu	Leu	Lys
	50				55					60					
Pro	Leu	Glu	Glu	Val	Leu	Asn	Leu	Ala	Gln	Ser	Lys	Asn	Phe	His	Leu
65				70					75						80
Arg	Pro	Arg	Asp	Leu	Ile	Ser	Asn	Ile	Asn	Val	Ile	Val	Leu	Glu	Leu
			85						90					95	
Lys	Gly	Ser	Glu	Thr	Thr	Ile	Met	Cys	Glu	Tyr	Ala	Asp	Glu	Thr	Ala
		100					105						110		
Thr	Ile	Val	Glu	Phe	Leu	Asn	Arg	Trp	Ile	Thr	Phe	Cys	Gln	Ser	Ile
		115					120					125			
Ile	Ser	Thr	Leu	Thr											
															130

<210> 462

<211> 133

<212> PRT

<213> Homo sapiens

<400> 462

Ala	Pro	Thr	Ser	Ser	Ser	Thr	Lys	Lys	Thr	Gln	Leu	Gln	Leu	Glu	His
1				5					10					15	
Leu	Leu	Leu	Asp	Leu	Gln	Met	Ile	Leu	Asn	Gly	Ile	Asn	Asn	Tyr	Lys
			20				25						30		
Asn	Pro	Lys	Leu	Thr	Arg	Met	Leu	Thr	Phe	Lys	Phe	Tyr	Met	Pro	Lys
		35				40						45			
Lys	Ala	Thr	Glu	Leu	Lys	His	Leu	Gln	Cys	Leu	Glu	Glu	Glu	Leu	Lys
	50				55					60					
Pro	Leu	Glu	Glu	Val	Leu	Asn	Leu	Ala	Gln	Ser	Lys	Asn	Phe	His	Leu
65				70					75						80
Arg	Pro	Arg	Asp	Leu	Ile	Ser	Asn	Ile	Asn	Val	Ile	Val	Leu	Glu	Leu
			85						90					95	
Lys	Gly	Ser	Glu	Thr	Thr	Val	Met	Cys	Glu	Tyr	Ala	Asp	Glu	Thr	Ala
		100					105						110		
Thr	Ile	Val	Glu	Phe	Leu	Asn	Arg	Trp	Ile	Thr	Phe	Cys	Gln	Ser	Ile
		115					120					125			
Ile	Ser	Thr	Leu	Thr											
															130

<210> 463

<211> 133

<212> PRT

<213> Homo sapiens

<400> 463

Ala	Pro	Thr	Ser	Ser	Ser	Thr	Lys	Lys	Thr	Gln	Leu	Gln	Leu	Glu	His
1				5					10					15	
Leu	Leu	Leu	Asp	Leu	Gln	Met	Ile	Leu	Asn	Gly	Ile	Asn	Asn	Tyr	Lys
			20				25						30		
Asn	Pro	Lys	Leu	Thr	Arg	Met	Leu	Thr	Phe	Lys	Phe	Tyr	Met	Pro	Lys
		35				40						45			
Lys	Ala	Thr	Glu	Leu	Lys	His	Leu	Gln	Cys	Leu	Glu	Glu	Glu	Leu	Lys
	50				55					60					
Pro	Leu	Glu	Glu	Val	Leu	Asn	Leu	Ala	Gln	Ser	Lys	Asn	Phe	His	Leu
65				70					75						80
Arg	Pro	Arg	Asp	Leu	Ile	Ser	Asn	Ile	Asn	Val	Ile	Val	Leu	Glu	Leu
			85						90					95	

Lys Gly Ser Glu Thr Phe Val Cys Glu Tyr Ala Asp Glu Ala  
100 105 110  
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile  
115 120 125  
Ile Ser Thr Leu Thr  
130

<210> 464  
<211> 133  
<212> PRT  
<213> Homo sapiens

<400> 464  
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His  
1 5 10 15  
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys  
20 25 30  
Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys  
35 40 45  
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys  
50 55 60  
Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu  
65 70 75 80  
Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu  
85 90 95  
Lys Gly Ser Glu Thr Thr Phe Ile Cys Glu Tyr Ala Asp Glu Thr Ala  
100 105 110  
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile  
115 120 125  
Ile Ser Thr Leu Thr  
130

<210> 465  
<211> 133  
<212> PRT  
<213> Homo sapiens

<400> 465  
Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His  
1 5 10 15  
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys  
20 25 30  
Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys  
35 40 45  
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys  
50 55 60  
Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu  
65 70 75 80  
Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu  
85 90 95  
Lys Gly Ser Glu Thr Thr Phe Met Cys Gln Tyr Ala Asp Glu Thr Ala  
100 105 110  
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile  
115 120 125  
Ile Ser Thr Leu Thr  
130

<210> 466  
<211> 133  
<212> PRT  
<213> Homo sapiens

<400> 466

Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu His  
1 5 10 15  
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys  
20 25 30  
Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys  
35 40 45  
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys  
50 55 60  
Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu  
65 70 75 80  
Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu  
85 90 95  
Lys Gly Ser Glu Thr Thr Phe Met Cys Asn Tyr Ala Asp Glu Thr Ala  
100 105 110  
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile  
115 120 125  
Ile Ser Thr Leu Thr  
130

<210> 467

<211> 133

<212> PRT

<213> Homo sapiens

<400> 467

Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His  
1 5 10 15  
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys  
20 25 30  
Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys  
35 40 45  
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys  
50 55 60  
Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu  
65 70 75 80  
Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu  
85 90 95  
Lys Gly Ser Glu Thr Thr Phe Met Cys His Tyr Ala Asp Glu Thr Ala  
100 105 110  
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile  
115 120 125  
Ile Ser Thr Leu Thr  
130

<210> 468

<211> 133

<212> PRT

<213> Homo sapiens

<400> 468

Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His  
1 5 10 15  
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys  
20 25 30  
Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys  
35 40 45  
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys  
50 55 60  
Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu  
65 70 75 80  
Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu  
85 90 95  
Lys Gly Ser Glu Thr Thr Phe Met Cys Glu His Ala Asp Glu Thr Ala

	100		105		110										
Thr	Ile	Val	Glu	Phe	Leu	Asn	Arg	Trp	Ile	Thr	Phe	Cys	Gln	Ser	Ile
	115						120						125		
Ile	Ser	Thr	Leu	Thr											
	130														

<210> 469  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 469

Ala	Pro	Thr	Ser	Ser	Thr	Lys	Lys	Thr	Gln	Leu	Gln	Leu	Glu	His	
1			5					10					15		
Leu	Leu	Leu	Asp	Leu	Gln	Met	Ile	Leu	Asn	Gly	Ile	Asn	Asn	Tyr	Lys
			20					25				30			
Asn	Pro	Lys	Leu	Thr	Arg	Met	Leu	Thr	Phe	Lys	Phe	Tyr	Met	Pro	Lys
		35					40					45			
Lys	Ala	Thr	Glu	Leu	Lys	His	Leu	Gln	Cys	Leu	Glu	Glu	Glu	Leu	Lys
		50				55					60				
Pro	Leu	Glu	Glu	Val	Leu	Asn	Leu	Ala	Gln	Ser	Lys	Asn	Phe	His	Leu
65					70					75					80
Arg	Pro	Arg	Asp	Leu	Ile	Ser	Asn	Ile	Asn	Val	Ile	Val	Leu	Glu	Leu
			85						90					95	
Lys	Gly	Ser	Glu	Thr	Thr	Phe	Met	Cys	Glu	Ile	Ala	Asp	Glu	Thr	Ala
			100					105					110		
Thr	Ile	Val	Glu	Phe	Leu	Asn	Arg	Trp	Ile	Thr	Phe	Cys	Gln	Ser	Ile
		115					120						125		
Ile	Ser	Thr	Leu	Thr											
	130														

<210> 470  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 470

Ala	Pro	Thr	Ser	Ser	Thr	Lys	Lys	Thr	Gln	Leu	Gln	Leu	Glu	His	
1			5					10					15		
Leu	Leu	Leu	Asp	Leu	Gln	Met	Ile	Leu	Asn	Gly	Ile	Asn	Asn	Tyr	Lys
			20					25				30			
Asn	Pro	Lys	Leu	Thr	Arg	Met	Leu	Thr	Phe	Lys	Phe	Tyr	Met	Pro	Lys
		35					40					45			
Lys	Ala	Thr	Glu	Leu	Lys	His	Leu	Gln	Cys	Leu	Glu	Glu	Glu	Leu	Lys
		50				55					60				
Pro	Leu	Glu	Glu	Val	Leu	Asn	Leu	Ala	Gln	Ser	Lys	Asn	Phe	His	Leu
65					70					75					80
Arg	Pro	Arg	Asp	Leu	Ile	Ser	Asn	Ile	Asn	Val	Ile	Val	Leu	Glu	Leu
			85						90					95	
Lys	Gly	Ser	Glu	Thr	Thr	Phe	Met	Cys	Glu	Tyr	Ala	Gln	Glu	Thr	Ala
			100					105					110		
Thr	Ile	Val	Glu	Phe	Leu	Asn	Arg	Trp	Ile	Thr	Phe	Cys	Gln	Ser	Ile
		115					120						125		
Ile	Ser	Thr	Leu	Thr											
	130														

<210> 471  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 471

Ala	Pro	Thr	Ser	Ser	Thr	Lys	Lys	Thr	Gln	Leu	Gln	Leu	Glu	His
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

1	5	10	
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys			
20	25	30	
Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys			
35	40	45	
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys			
50	55	60	
Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu			
65	70	75	80
Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu			
85	90	95	
Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asn Glu Thr Ala			
100	105	110	
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile			
115	120	125	
Ile Ser Thr Leu Thr			
130			

<210> 472

<211> 133

<212> PRT

<213> Homo sapiens

<400> 472

Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His	
1	5
10	15
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys	
20	25
30	35
Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys	
40	45
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Leu Lys	
50	55
60	65
Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu	
70	75
80	85
Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu	
90	95
Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Gln Thr Ala	
100	105
110	115
Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile	
120	125
Ile Ser Thr Leu Thr	
130	

<210> 473

<211> 133

<212> PRT

<213> Homo sapiens

<400> 473

Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His	
1	5
10	15
Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys	
20	25
30	35
Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys	
40	45
Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Leu Lys	
50	55
60	65
Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu	
70	75
80	85
Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu	
90	95
Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Asn Thr Ala	
100	105
110	



Thr Ile Val Glu Phe Asn Arg Trp Ile Thr Phe Cys Gln Ile  
 115 120 125  
 Ile Ser Thr Leu Thr  
 130

<210> 474  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 474  
 Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His  
 1 5 10 15  
 Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys  
 20 25 30  
 Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys  
 35 40 45  
 Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Leu Lys  
 50 55 60  
 Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu  
 65 70 75 80  
 Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu  
 85 90 95  
 Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp His Thr Ala  
 100 105 110  
 Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile  
 115 120 125  
 Ile Ser Thr Leu Thr  
 130

<210> 475  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 475  
 Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His  
 1 5 10 15  
 Leu Leu Leu Asp Leu Gln Met Ile Leu Asn Gly Ile Asn Asn Tyr Lys  
 20 25 30  
 Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys  
 35 40 45  
 Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Leu Lys  
 50 55 60  
 Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu  
 65 70 75 80  
 Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu  
 85 90 95  
 Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala  
 100 105 110  
 Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile  
 115 120 125  
 Ile Ser Thr Val Thr  
 130

<210> 476  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 476  
 Ala Pro Thr Ser Ser Ser Thr Lys Lys Thr Gln Leu Gln Leu Glu His  
 1 5 10 15

Leu Leu Leu Asp Leu Met Ile Leu Asn Gly Ile Asn Asn Lys  
           20                  25                  30  
 Asn Pro Lys Leu Thr Arg Met Leu Thr Phe Lys Phe Tyr Met Pro Lys  
           35                  40                  45  
 Lys Ala Thr Glu Leu Lys His Leu Gln Cys Leu Glu Glu Glu Leu Lys  
           50                  55                  60  
 Pro Leu Glu Glu Val Leu Asn Leu Ala Gln Ser Lys Asn Phe His Leu  
           65                  70                  75                  80  
 Arg Pro Arg Asp Leu Ile Ser Asn Ile Asn Val Ile Val Leu Glu Leu  
                   85                  90                  95  
 Lys Gly Ser Glu Thr Thr Phe Met Cys Glu Tyr Ala Asp Glu Thr Ala  
                   100                  105                  110  
 Thr Ile Val Glu Phe Leu Asn Arg Trp Ile Thr Phe Cys Gln Ser Ile  
                   115                  120                  125  
 Ile Ser Thr Ile Thr  
           130

<210> 477

<211> 133

<212> PRT

<213> Homo sapiens

<400> 477

Ala Pro Met Thr Gln Thr Thr Pro Leu Lys Thr Ser Trp Val Asn Cys  
   1                  5                  10                  15  
 Ser Asn Met Ile Asp Glu Ile Ile Thr His Leu Lys Gln Pro Pro Leu  
           20                  25                  30  
 Pro Leu Leu Asp Ile Asn Asn Leu Asn Gly Glu Asp Gln Asp Ile Leu  
           35                  40                  45  
 Met Glu Asn Asn Leu Arg Arg Pro Asn Leu Glu Ala Phe Asn Arg Ala  
           50                  55                  60  
 Val Lys Ser Leu Gln Asn Ala Ser Ala Ile Glu Ser Ile Leu Lys Asn  
           65                  70                  75                  80  
 Leu Leu Pro Cys Leu Pro Leu Ala Thr Ala Ala Pro Thr Arg His Pro  
                   85                  90                  95  
 Ile His Ile Lys Asp Gly Asp Trp Asn Glu Phe Arg Arg Lys Leu Thr  
                   100                  105                  110  
 Phe Tyr Leu Lys Thr Leu Glu Asn Ala Gln Ala Gln Gln Thr Thr Leu  
                   115                  120                  125  
 Ser Leu Ala Ile Phe  
           130

<210> 478

<211> 133

<212> PRT

<213> Homo sapiens

<400> 478

Ala Pro Met Thr Gln Thr Thr Pro Leu Lys Thr Ser Trp Val Asn Cys  
   1                  5                  10                  15  
 Ser Asn Met Ile Asp Glu Ile Ile Thr His Leu Lys Gln Pro Pro Leu  
           20                  25                  30  
 Pro Leu Leu Asp Val Asn Asn Leu Asn Gly Glu Asp Gln Asp Ile Leu  
           35                  40                  45  
 Met Glu Asn Asn Leu Arg Arg Pro Asn Leu Glu Ala Phe Asn Arg Ala  
           50                  55                  60  
 Val Lys Ser Leu Gln Asn Ala Ser Ala Ile Glu Ser Ile Leu Lys Asn  
           65                  70                  75                  80  
 Leu Leu Pro Cys Leu Pro Leu Ala Thr Ala Ala Pro Thr Arg His Pro  
                   85                  90                  95  
 Ile His Ile Lys Asp Gly Asp Trp Asn Glu Phe Arg Arg Lys Leu Thr  
                   100                  105                  110  
 Phe Tyr Leu Lys Thr Leu Glu Asn Ala Gln Ala Gln Gln Thr Thr Leu

115  
Ser Leu Ala Ile Phe  
130

120

125

<210> 479  
<211> 133  
<212> PRT  
<213> Homo sapiens

<400> 479  
Ala Pro Met Thr Gln Thr Thr Pro Leu Lys Thr Ser Trp Val Asn Cys  
1 5 10 15  
Ser Asn Met Ile Asp Glu Ile Ile Thr His Leu Lys Gln Pro Pro Leu  
20 25 30  
Pro Leu Leu Asp Phe Asn Asn Leu Asn Gly Gln Asp Gln Asp Ile Leu  
35 40 45  
Met Glu Asn Asn Leu Arg Arg Pro Asn Leu Glu Ala Phe Asn Arg Ala  
50 55 60  
Val Lys Ser Leu Gln Asn Ala Ser Ala Ile Glu Ser Ile Leu Lys Asn  
65 70 75 80  
Leu Leu Pro Cys Leu Pro Leu Ala Thr Ala Ala Pro Thr Arg His Pro  
85 90 95  
Ile His Ile Lys Asp Gly Asp Trp Asn Glu Phe Arg Arg Lys Leu Thr  
100 105 110  
Phe Tyr Leu Lys Thr Leu Glu Asn Ala Gln Ala Gln Gln Thr Thr Leu  
115 120 125  
Ser Leu Ala Ile Phe  
130

<210> 480  
<211> 133  
<212> PRT  
<213> Homo sapiens

<400> 480  
Ala Pro Met Thr Gln Thr Thr Pro Leu Lys Thr Ser Trp Val Asn Cys  
1 5 10 15  
Ser Asn Met Ile Asp Glu Ile Ile Thr His Leu Lys Gln Pro Pro Leu  
20 25 30  
Pro Leu Leu Asp Phe Asn Asn Leu Asn Gly Asn Asp Gln Asp Ile Leu  
35 40 45  
Met Glu Asn Asn Leu Arg Arg Pro Asn Leu Glu Ala Phe Asn Arg Ala  
50 55 60  
Val Lys Ser Leu Gln Asn Ala Ser Ala Ile Glu Ser Ile Leu Lys Asn  
65 70 75 80  
Leu Leu Pro Cys Leu Pro Leu Ala Thr Ala Ala Pro Thr Arg His Pro  
85 90 95  
Ile His Ile Lys Asp Gly Asp Trp Asn Glu Phe Arg Arg Lys Leu Thr  
100 105 110  
Phe Tyr Leu Lys Thr Leu Glu Asn Ala Gln Ala Gln Gln Thr Thr Leu  
115 120 125  
Ser Leu Ala Ile Phe  
130

<210> 481  
<211> 133  
<212> PRT  
<213> Homo sapiens

<400> 481  
Ala Pro Met Thr Gln Thr Thr Pro Leu Lys Thr Ser Trp Val Asn Cys  
1 5 10 15  
Ser Asn Met Ile Asp Glu Ile Ile Thr His Leu Lys Gln Pro Pro Leu

20	25	30
Pro Leu Leu Asp Phe Asn Asn Leu Asn Gly His Asp Gln Asp Ile Leu		
35	40	45
Met Glu Asn Asn Leu Arg Arg Pro Asn Leu Glu Ala Phe Asn Arg Ala		
50	55	60
Val Lys Ser Leu Gln Asn Ala Ser Ala Ile Glu Ser Ile Leu Lys Asn		
65	70	75
Leu Leu Pro Cys Leu Pro Leu Ala Thr Ala Ala Pro Thr Arg His Pro		
85	90	95
Ile His Ile Lys Asp Gly Asp Trp Asn Glu Phe Arg Arg Lys Leu Thr		
100	105	110
Phe Tyr Leu Lys Thr Leu Glu Asn Ala Gln Ala Gln Gln Thr Thr Leu		
115	120	125
Ser Leu Ala Ile Phe		
130		

<210> 482  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 482
Ala Pro Met Thr Gln Thr Thr Pro Leu Lys Thr Ser Trp Val Asn Cys
1 5 10 15
Ser Asn Met Ile Asp Glu Ile Ile Thr His Leu Lys Gln Pro Pro Leu
20 25 30
Pro Leu Leu Asp Phe Asn Asn Leu Asn Gly Glu Asp Gln Gln Ile Leu
35 40 45
Met Glu Asn Asn Leu Arg Arg Pro Asn Leu Glu Ala Phe Asn Arg Ala
50 55 60
Val Lys Ser Leu Gln Asn Ala Ser Ala Ile Glu Ser Ile Leu Lys Asn
65 70 75 80
Leu Leu Pro Cys Leu Pro Leu Ala Thr Ala Ala Pro Thr Arg His Pro
85 90 95
Ile His Ile Lys Asp Gly Asp Trp Asn Glu Phe Arg Arg Lys Leu Thr
100 105 110
Phe Tyr Leu Lys Thr Leu Glu Asn Ala Gln Ala Gln Gln Thr Thr Leu
115 120 125
Ser Leu Ala Ile Phe
130

<210> 483  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 483
Ala Pro Met Thr Gln Thr Thr Pro Leu Lys Thr Ser Trp Val Asn Cys
1 5 10 15
Ser Asn Met Ile Asp Glu Ile Ile Thr His Leu Lys Gln Pro Pro Leu
20 25 30
Pro Leu Leu Asp Phe Asn Asn Leu Asn Gly Glu Asp Gln Asn Ile Leu
35 40 45
Met Glu Asn Asn Leu Arg Arg Pro Asn Leu Glu Ala Phe Asn Arg Ala
50 55 60
Val Lys Ser Leu Gln Asn Ala Ser Ala Ile Glu Ser Ile Leu Lys Asn
65 70 75 80
Leu Leu Pro Cys Leu Pro Leu Ala Thr Ala Ala Pro Thr Arg His Pro
85 90 95
Ile His Ile Lys Asp Gly Asp Trp Asn Glu Phe Arg Arg Lys Leu Thr
100 105 110
Phe Tyr Leu Lys Thr Leu Glu Asn Ala Gln Ala Gln Gln Thr Thr Leu
115 120 125

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<210> 484
<211> 133
<212> PRT
<213> Homo sapiens
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<400> 484
Ala Pro Met Thr Gln Thr Thr Pro Leu Lys Thr Ser Trp Val Asn Cys
  1              5              10              15
Ser Asn Met Ile Asp Glu Ile Ile Thr His Leu Lys Gln Pro Pro Leu
              20              25              30
Pro Leu Leu Asp Phe Asn Asn Leu Asn Gly Glu Asp Gln Asp Ile Leu
              35              40              45
Met Glu Asn Asn Leu Arg Arg Pro Asn Leu Gln Ala Phe Asn Arg Ala
              50              55              60
Val Lys Ser Leu Gln Asn Ala Ser Ala Ile Glu Ser Ile Leu Lys Asn
  65              70              75              80
Leu Leu Pro Cys Leu Pro Leu Ala Thr Ala Ala Pro Thr Arg His Pro
              85              90              95
Ile His Ile Lys Asp Gly Asp Trp Asn Glu Phe Arg Arg Lys Leu Thr
              100              105              110
Phe Tyr Leu Lys Thr Leu Glu Asn Ala Gln Ala Gln Gln Thr Thr Leu
              115              120              125
Ser Leu Ala Ile Phe
              130

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<210> 485
<211> 133
<212> PRT
<213> Homo sapiens
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<400>	485
Ala Pro Met Thr Gln Thr Thr Pro Leu Lys Thr Ser Trp Val Asn Cys	
1                                5                                10                                15	
Ser Asn Met Ile Asp Glu Ile Ile Thr His Leu Lys Gln Pro Pro Leu	
20                                25                                30	
Pro Leu Leu Asp Phe Asn Asn Leu Asn Gly Glu Asp Gln Asp Ile Leu	
35                                40                                45	
Met Glu Asn Asn Leu Arg Arg Pro Asn Leu Asn Ala Phe Asn Arg Ala	
50                                55                                60	
Val Lys Ser Leu Gln Asn Ala Ser Ala Ile Glu Ser Ile Leu Lys Asn	
65                                70                                75                                80	
Leu Leu Pro Cys Leu Pro Leu Ala Thr Ala Pro Thr Arg His Pro	
85                                90                                95	
Ile His Ile Lys Asp Gly Asp Trp Asn Glu Phe Arg Arg Lys Leu Thr	
100                                105                                110	
Phe Tyr Leu Lys Thr Leu Glu Asn Ala Gln Ala Gln Gln Thr Thr Leu	
115                                120                                125	
Ser Leu Ala Ile Phe	
130	

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<210> 486
<211> 133
<212> PRT
<213> Homo sapiens
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<400> 486
Ala Pro Met Thr Gln Thr Thr Pro Leu Lys Thr Ser Trp Val Asn Cys
 1             5             10             15
Ser Asn Met Ile Asp Glu Ile Ile Thr His Leu Lys Gln Pro Pro Leu
      20             25             30

```

Pro Leu Leu Asp Phe Asn Asn Leu Asn Gly Glu Asp Gln Asp Leu  
 35 40 45  
 Met Glu Asn Asn Leu Arg Arg Pro Asn Leu His Ala Phe Asn Arg Ala  
 50 55 60  
 Val Lys Ser Leu Gln Asn Ala Ser Ala Ile Glu Ser Ile Leu Lys Asn  
 65 70 75 80  
 Leu Leu Pro Cys Leu Pro Leu Ala Thr Ala Ala Pro Thr Arg His Pro  
 85 90 95  
 Ile His Ile Lys Asp Gly Asp Trp Asn Glu Phe Arg Arg Lys Leu Thr  
 100 105 110  
 Phe Tyr Leu Lys Thr Leu Glu Asn Ala Gln Ala Gln Gln Thr Thr Leu  
 115 120 125  
 Ser Leu Ala Ile Phe  
 130

<210> 487  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 487  
 Ala Pro Met Thr Gln Thr Thr Pro Leu Lys Thr Ser Trp Val Asn Cys  
 1 5 10 15  
 Ser Asn Met Ile Asp Glu Ile Ile Thr His Leu Lys Gln Pro Pro Leu  
 20 25 30  
 Pro Leu Leu Asp Phe Asn Asn Leu Asn Gly Glu Asp Gln Asp Ile Leu  
 35 40 45  
 Met Glu Asn Asn Leu Arg Arg Pro Asn Leu Glu Ala Phe Asn His Ala  
 50 55 60  
 Val Lys Ser Leu Gln Asn Ala Ser Ala Ile Glu Ser Ile Leu Lys Asn  
 65 70 75 80  
 Leu Leu Pro Cys Leu Pro Leu Ala Thr Ala Ala Pro Thr Arg His Pro  
 85 90 95  
 Ile His Ile Lys Asp Gly Asp Trp Asn Glu Phe Arg Arg Lys Leu Thr  
 100 105 110  
 Phe Tyr Leu Lys Thr Leu Glu Asn Ala Gln Ala Gln Gln Thr Thr Leu  
 115 120 125  
 Ser Leu Ala Ile Phe  
 130

<210> 488  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 488  
 Ala Pro Met Thr Gln Thr Thr Pro Leu Lys Thr Ser Trp Val Asn Cys  
 1 5 10 15  
 Ser Asn Met Ile Asp Glu Ile Ile Thr His Leu Lys Gln Pro Pro Leu  
 20 25 30  
 Pro Leu Leu Asp Phe Asn Asn Leu Asn Gly Glu Asp Gln Asp Ile Leu  
 35 40 45  
 Met Glu Asn Asn Leu Arg Arg Pro Asn Leu Glu Ala Phe Asn Gln Ala  
 50 55 60  
 Val Lys Ser Leu Gln Asn Ala Ser Ala Ile Glu Ser Ile Leu Lys Asn  
 65 70 75 80  
 Leu Leu Pro Cys Leu Pro Leu Ala Thr Ala Ala Pro Thr Arg His Pro  
 85 90 95  
 Ile His Ile Lys Asp Gly Asp Trp Asn Glu Phe Arg Arg Lys Leu Thr  
 100 105 110  
 Phe Tyr Leu Lys Thr Leu Glu Asn Ala Gln Ala Gln Gln Thr Thr Leu  
 115 120 125  
 Ser Leu Ala Ile Phe

<210> 489  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 489

Ala	Pro	Met	Thr	Gln	Thr	Thr	Pro	Leu	Lys	Thr	Ser	Trp	Val	Asn	Cys
1				5					10					15	
Ser	Asn	Met	Ile	Asp	Glu	Ile	Ile	Thr	His	Leu	Lys	Gln	Pro	Pro	Leu
		20						25					30		
Pro	Leu	Leu	Asp	Phe	Asn	Asn	Leu	Asn	Gly	Glu	Asp	Gln	Asp	Ile	Leu
		35					40					45			
Met	Glu	Asn	Asn	Leu	Arg	Arg	Pro	Asn	Leu	Glu	Ala	Phe	Asn	Arg	Ala
	50					55					60				
Val	Gln	Ser	Leu	Gln	Asn	Ala	Ser	Ala	Ile	Glu	Ser	Ile	Leu	Lys	Asn
65					70					75				80	
Leu	Leu	Pro	Cys	Leu	Pro	Leu	Ala	Thr	Ala	Ala	Pro	Thr	Arg	His	Pro
			85					90						95	
Ile	His	Ile	Lys	Asp	Gly	Asp	Trp	Asn	Glu	Phe	Arg	Arg	Lys	Leu	Thr
		100						105					110		
Phe	Tyr	Leu	Lys	Thr	Leu	Glu	Asn	Ala	Gln	Ala	Gln	Gln	Thr	Thr	Leu
		115					120					125			
Ser	Leu	Ala	Ile	Phe											
															130

<210> 490  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 490

Ala	Pro	Met	Thr	Gln	Thr	Thr	Pro	Leu	Lys	Thr	Ser	Trp	Val	Asn	Cys
1				5					10					15	
Ser	Asn	Met	Ile	Asp	Glu	Ile	Ile	Thr	His	Leu	Lys	Gln	Pro	Pro	Leu
		20						25					30		
Pro	Leu	Leu	Asp	Phe	Asn	Asn	Leu	Asn	Gly	Glu	Asp	Gln	Asp	Ile	Leu
		35					40					45			
Met	Glu	Asn	Asn	Leu	Arg	Arg	Pro	Asn	Leu	Glu	Ala	Phe	Asn	Arg	Ala
	50					55					60				
Val	Asn	Ser	Leu	Gln	Asn	Ala	Ser	Ala	Ile	Glu	Ser	Ile	Leu	Lys	Asn
65					70					75				80	
Leu	Leu	Pro	Cys	Leu	Pro	Leu	Ala	Thr	Ala	Ala	Pro	Thr	Arg	His	Pro
			85					90						95	
Ile	His	Ile	Lys	Asp	Gly	Asp	Trp	Asn	Glu	Phe	Arg	Arg	Lys	Leu	Thr
		100						105					110		
Phe	Tyr	Leu	Lys	Thr	Leu	Glu	Asn	Ala	Gln	Ala	Gln	Gln	Thr	Thr	Leu
		115					120					125			
Ser	Leu	Ala	Ile	Phe											
															130

<210> 491  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 491

Ala	Pro	Met	Thr	Gln	Thr	Thr	Pro	Leu	Lys	Thr	Ser	Trp	Val	Asn	Cys
1				5					10					15	
Ser	Asn	Met	Ile	Asp	Glu	Ile	Ile	Thr	His	Leu	Lys	Gln	Pro	Pro	Leu
		20						25					30		
Pro	Leu	Leu	Asp	Phe	Asn	Asn	Leu	Asn	Gly	Glu	Asp	Gln	Asp	Ile	Leu

35	40	45
Met Glu Asn Asn Leu Arg Arg Pro Asn Leu Glu Ala Phe Asn Arg Ala		
50	55	60
Val Lys Ser Leu Gln Asn Ala Ser Ala Ile Glu Ser Ile Leu Lys Asn		
65	70	75
Leu Leu Pro Cys Leu Pro Leu Ala Thr Ala Ala Pro Thr Arg His Ser		
85	90	95
Ile His Ile Lys Asp Gly Asp Trp Asn Glu Phe Arg Arg Lys Leu Thr		
100	105	110
Phe Tyr Leu Lys Thr Leu Glu Asn Ala Gln Ala Gln Gln Thr Thr Leu		
115	120	125
Ser Leu Ala Ile Phe		
130		

<210> 492  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 492
Ala Pro Met Thr Gln Thr Thr Pro Leu Lys Thr Ser Trp Val Asn Cys
1 5 10 15
Ser Asn Met Ile Asp Glu Ile Ile Thr His Leu Lys Gln Pro Pro Leu
20 25 30
Pro Leu Leu Asp Phe Asn Asn Leu Asn Gly Glu Asp Gln Asp Ile Leu
35 40 45
Met Glu Asn Asn Leu Arg Arg Pro Asn Leu Glu Ala Phe Asn Arg Ala
50 55 60
Val Lys Ser Leu Gln Asn Ala Ser Ala Ile Glu Ser Ile Leu Lys Asn
65 70 75 80
Leu Leu Pro Cys Leu Pro Leu Ala Thr Ala Ala Pro Thr Arg His Ala
85 90 95
Ile His Ile Lys Asp Gly Asp Trp Asn Glu Phe Arg Arg Lys Leu Thr
100 105 110
Phe Tyr Leu Lys Thr Leu Glu Asn Ala Gln Ala Gln Gln Thr Thr Leu
115 120 125
Ser Leu Ala Ile Phe
130

<210> 493  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 493
Ala Pro Met Thr Gln Thr Thr Pro Leu Lys Thr Ser Trp Val Asn Cys
1 5 10 15
Ser Asn Met Ile Asp Glu Ile Ile Thr His Leu Lys Gln Pro Pro Leu
20 25 30
Pro Leu Leu Asp Phe Asn Asn Leu Asn Gly Glu Asp Gln Asp Ile Leu
35 40 45
Met Glu Asn Asn Leu Arg Arg Pro Asn Leu Glu Ala Phe Asn Arg Ala
50 55 60
Val Lys Ser Leu Gln Asn Ala Ser Ala Ile Glu Ser Ile Leu Lys Asn
65 70 75 80
Leu Leu Pro Cys Leu Pro Leu Ala Thr Ala Ala Pro Thr Arg His Pro
85 90 95
Ile His Ile Gln Asp Gly Asp Trp Asn Glu Phe Arg Arg Lys Leu Thr
100 105 110
Phe Tyr Leu Lys Thr Leu Glu Asn Ala Gln Ala Gln Gln Thr Thr Leu
115 120 125
Ser Leu Ala Ile Phe
130



<210> 494  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 494  
 Ala Pro Met Thr Gln Thr Thr Pro Leu Lys Thr Ser Trp Val Asn Cys  
 1 5 10 15  
 Ser Asn Met Ile Asp Glu Ile Ile Thr His Leu Lys Gln Pro Pro Leu  
 20 25 30  
 Pro Leu Leu Asp Phe Asn Asn Leu Asn Gly Glu Asp Gln Asp Ile Leu  
 35 40 45  
 Met Glu Asn Asn Leu Arg Arg Pro Asn Leu Glu Ala Phe Asn Arg Ala  
 50 55 60  
 Val Lys Ser Leu Gln Asn Ala Ser Ala Ile Glu Ser Ile Leu Lys Asn  
 65 70 75 80  
 Leu Leu Pro Cys Leu Pro Leu Ala Thr Ala Ala Pro Thr Arg His Pro  
 85 90 95  
 Ile His Ile Asn Asp Gly Asp Trp Asn Glu Phe Arg Arg Lys Leu Thr  
 100 105 110  
 Phe Tyr Leu Lys Thr Leu Glu Asn Ala Gln Ala Gln Gln Thr Thr Leu  
 115 120 125  
 Ser Leu Ala Ile Phe  
 130

<210> 495  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 495  
 Ala Pro Met Thr Gln Thr Thr Pro Leu Lys Thr Ser Trp Val Asn Cys  
 1 5 10 15  
 Ser Asn Met Ile Asp Glu Ile Ile Thr His Leu Lys Gln Pro Pro Leu  
 20 25 30  
 Pro Leu Leu Asp Phe Asn Asn Leu Asn Gly Glu Asp Gln Asp Ile Leu  
 35 40 45  
 Met Glu Asn Asn Leu Arg Arg Pro Asn Leu Glu Ala Phe Asn Arg Ala  
 50 55 60  
 Val Lys Ser Leu Gln Asn Ala Ser Ala Ile Glu Ser Ile Leu Lys Asn  
 65 70 75 80  
 Leu Leu Pro Cys Leu Pro Leu Ala Thr Ala Ala Pro Thr Arg His Pro  
 85 90 95  
 Ile His Ile Lys Gln Gly Asp Trp Asn Glu Phe Arg Arg Lys Leu Thr  
 100 105 110  
 Phe Tyr Leu Lys Thr Leu Glu Asn Ala Gln Ala Gln Gln Thr Thr Leu  
 115 120 125  
 Ser Leu Ala Ile Phe  
 130

<210> 496  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 496  
 Ala Pro Met Thr Gln Thr Thr Pro Leu Lys Thr Ser Trp Val Asn Cys  
 1 5 10 15  
 Ser Asn Met Ile Asp Glu Ile Ile Thr His Leu Lys Gln Pro Pro Leu  
 20 25 30  
 Pro Leu Leu Asp Phe Asn Asn Leu Asn Gly Glu Asp Gln Asp Ile Leu  
 35 40 45

Met Glu Asn Asn Leu Arg Pro Asn Leu Glu Ala Phe Asn Ala  
 50 55 60  
 Val Lys Ser Leu Gln Asn Ala Ser Ala Ile Glu Ser Ile Leu Lys Asn  
 65 70 75 80  
 Leu Leu Pro Cys Leu Pro Leu Ala Thr Ala Ala Pro Thr Arg His Pro  
 85 90 95  
 Ile His Ile Lys Asn Gly Asp Trp Asn Glu Phe Arg Arg Lys Leu Thr  
 100 105 110  
 Phe Tyr Leu Lys Thr Leu Glu Asn Ala Gln Ala Gln Gln Thr Thr Leu  
 115 120 125  
 Ser Leu Ala Ile Phe  
 130

<210> 497  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 497  
 Ala Pro Met Thr Gln Thr Thr Pro Leu Lys Thr Ser Trp Val Asn Cys  
 1 5 10 15  
 Ser Asn Met Ile Asp Glu Ile Ile Thr His Leu Lys Gln Pro Pro Leu  
 20 25 30  
 Pro Leu Leu Asp Phe Asn Asn Leu Asn Gly Glu Asp Gln Asp Ile Leu  
 35 40 45  
 Met Glu Asn Asn Leu Arg Arg Pro Asn Leu Glu Ala Phe Asn Arg Ala  
 50 55 60  
 Val Lys Ser Leu Gln Asn Ala Ser Ala Ile Glu Ser Ile Leu Lys Asn  
 65 70 75 80  
 Leu Leu Pro Cys Leu Pro Leu Ala Thr Ala Ala Pro Thr Arg His Pro  
 85 90 95  
 Ile His Ile Lys Asp Gly Gln Trp Asn Glu Phe Arg Arg Lys Leu Thr  
 100 105 110  
 Phe Tyr Leu Lys Thr Leu Glu Asn Ala Gln Ala Gln Gln Thr Thr Leu  
 115 120 125  
 Ser Leu Ala Ile Phe  
 130

<210> 498  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 498  
 Ala Pro Met Thr Gln Thr Thr Pro Leu Lys Thr Ser Trp Val Asn Cys  
 1 5 10 15  
 Ser Asn Met Ile Asp Glu Ile Ile Thr His Leu Lys Gln Pro Pro Leu  
 20 25 30  
 Pro Leu Leu Asp Phe Asn Asn Leu Asn Gly Glu Asp Gln Asp Ile Leu  
 35 40 45  
 Met Glu Asn Asn Leu Arg Arg Pro Asn Leu Glu Ala Phe Asn Arg Ala  
 50 55 60  
 Val Lys Ser Leu Gln Asn Ala Ser Ala Ile Glu Ser Ile Leu Lys Asn  
 65 70 75 80  
 Leu Leu Pro Cys Leu Pro Leu Ala Thr Ala Ala Pro Thr Arg His Pro  
 85 90 95  
 Ile His Ile Lys Asp Gly Asn Trp Asn Glu Phe Arg Arg Lys Leu Thr  
 100 105 110  
 Phe Tyr Leu Lys Thr Leu Glu Asn Ala Gln Ala Gln Gln Thr Thr Leu  
 115 120 125  
 Ser Leu Ala Ile Phe  
 130

<210> 499  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 499  
 Glu Gly Ile Cys Arg Asn Arg Val Thr Asn Asn Val Lys Asp Val Thr  
 1 5 10 15  
 Lys Leu Val Ala Asn Leu Pro Lys Asp Tyr Val Ile Thr Leu Lys Tyr  
 20 25 30  
 Val Pro Gly Met Asp Val Leu Pro Ser His Cys Trp Ile Ser Glu Met  
 35 40 45  
 Val Val Gln Leu Ser Asp Ser Leu Thr Asp Leu Leu Asp Lys Phe Ser  
 50 55 60  
 Asn Ile Ser Glu Gly Leu Ser Asn Tyr Ser Ile Ile Asp Lys Leu Val  
 65 70 75 80  
 Asn Ile Val Asp Asp Leu Val Glu Cys Val Lys Glu Asn Ser Ser Lys  
 85 90 95  
 Asp Leu Lys Lys Ser Phe Lys Ser Pro Glu Pro Arg Leu Phe Thr Pro  
 100 105 110  
 Glu Glu Phe Phe Arg Ile Phe Asn Arg Ser Ile Asp Ala Phe Lys Asp  
 115 120 125  
 Phe Val Val Ala Ser Glu Thr Ser Asp Cys Val Val Ser Ser Thr Leu  
 130 135 140  
 Ser Pro Glu Lys Asp Ser Arg Val Ser Val Thr Lys Pro Phe Met Leu  
 145 150 155 160  
 Pro Pro Val Ala Ala Ser Ser Leu Arg Asn Asp Ser Ser Ser Ser Asn  
 165 170 175  
 Arg Lys Ala Lys Asn Pro Pro Gly Asp Ser Ser Leu His Trp Ala Ala  
 180 185 190  
 Met Ala Leu Pro Ala Leu Phe Ser Leu Ile Ile Gly Phe Ala Phe Gly  
 195 200 205  
 Ala Leu Tyr Trp Lys Lys Arg Gln Pro Ser Leu Thr Arg Ala Val Glu  
 210 215 220  
 Asn Ile Gln Ile Asn Glu Glu Asp Asn Glu Ile Ser Met Leu Gln Glu  
 225 230 235 240  
 Lys Glu Arg Glu Phe Gln Glu Val  
 245

<210> 500  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 500  
 Glu Gly Ile Cys Arg Asn Arg Val Thr Asn Asn Val Lys Asp Val Thr  
 1 5 10 15  
 Lys Leu Val Ala Asn Leu Pro Lys Asp Tyr Ile Ile Thr Leu Lys Tyr  
 20 25 30  
 Val Pro Gly Met Asp Val Leu Pro Ser His Cys Trp Ile Ser Glu Met  
 35 40 45  
 Val Val Gln Leu Ser Asp Ser Leu Thr Asp Leu Leu Asp Lys Phe Ser  
 50 55 60  
 Asn Ile Ser Glu Gly Leu Ser Asn Tyr Ser Ile Ile Asp Lys Leu Val  
 65 70 75 80  
 Asn Ile Val Asp Asp Leu Val Glu Cys Val Lys Glu Asn Ser Ser Lys  
 85 90 95  
 Asp Leu Lys Lys Ser Phe Lys Ser Pro Glu Pro Arg Leu Phe Thr Pro  
 100 105 110  
 Glu Glu Phe Phe Arg Ile Phe Asn Arg Ser Ile Asp Ala Phe Lys Asp  
 115 120 125  
 Phe Val Val Ala Ser Glu Thr Ser Asp Cys Val Val Ser Ser Thr Leu

130	Ser Pro Glu Lys Asp	135	Ser Arg Val Ser Val Thr Lys Pro Phe Met Leu
145	Pro Pro Val Ala Ala	150	Ser Ser Leu Arg Asn Asp Ser Ser Ser Ser Asn
	165	170	175
Arg Lys Ala Lys Asn Pro Pro Gly Asp Ser Ser Leu His Trp Ala Ala		185	190
Met Ala Leu Pro Ala Leu Phe Ser Leu Ile Ile Gly Phe Ala Phe Gly		200	205
195	210	215	220
Ala Leu Tyr Trp Lys Lys Arg Gln Pro Ser Leu Thr Arg Ala Val Glu		230	235
225	230	235	240
Lys Glu Arg Glu Phe Gln Glu Val			
245			

<210> 501  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 501	Glu Gly Ile Cys Arg Asn Arg Val Thr Asn Asn Val Lys Asp Val Thr
1	5 10 15
Lys Leu Val Ala Asn Leu Pro Lys Asp Tyr Met Ile Thr Leu Gln Tyr	
20	25 30
Val Pro Gly Met Asp Val Leu Pro Ser His Cys Trp Ile Ser Glu Met	
35	40 45
Val Val Gln Leu Ser Asp Ser Leu Thr Asp Leu Leu Asp Lys Phe Ser	
50	55 60
Asn Ile Ser Glu Gly Leu Ser Asn Tyr Ser Ile Ile Asp Lys Leu Val	
65	70 75 80
Asn Ile Val Asp Asp Leu Val Glu Cys Val Lys Glu Asn Ser Ser Lys	
85	90 95
Asp Leu Lys Lys Ser Phe Lys Ser Pro Glu Pro Arg Leu Phe Thr Pro	
100	105 110
Glu Glu Phe Phe Arg Ile Phe Asn Arg Ser Ile Asp Ala Phe Lys Asp	
115	120 125
Phe Val Val Ala Ser Glu Thr Ser Asp Cys Val Val Ser Ser Thr Leu	
130	135 140
Ser Pro Glu Lys Asp Ser Arg Val Ser Val Thr Lys Pro Phe Met Leu	
145	150 155 160
Pro Pro Val Ala Ala Ser Ser Leu Arg Asn Asp Ser Ser Ser Ser Asn	
165	170 175
Arg Lys Ala Lys Asn Pro Pro Gly Asp Ser Ser Leu His Trp Ala Ala	
180	185 190
Met Ala Leu Pro Ala Leu Phe Ser Leu Ile Ile Gly Phe Ala Phe Gly	
195	200 205
Ala Leu Tyr Trp Lys Lys Arg Gln Pro Ser Leu Thr Arg Ala Val Glu	
210	215 220
Asn Ile Gln Ile Asn Glu Glu Asp Asn Glu Ile Ser Met Leu Gln Glu	
225	230 235 240
Lys Glu Arg Glu Phe Gln Glu Val	
245	

<210> 502  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 502

Glu	Gly	Ile	Cys	Arg	Arg	Val	Thr	Asn	Asn	Val	Lys	Asp	Thr
1			5					10				15	
Lys	Leu	Val	Ala	Asn	Leu	Pro	Lys	Asp	Tyr	Met	Ile	Thr	Leu
			20					25				30	Asn
Val	Pro	Gly	Met	Asp	Val	Leu	Pro	Ser	His	Cys	Trp	Ile	Ser
			35					40				45	Glu
Val	Val	Gln	Leu	Ser	Asp	Ser	Leu	Thr	Asp	Leu	Leu	Asp	Lys
			50					55				60	Phe
Asn	Ile	Ser	Glu	Gly	Leu	Ser	Asn	Tyr	Ser	Ile	Ile	Asp	Lys
65					70					75			Leu
Asn	Ile	Val	Asp	Asp	Leu	Val	Glu	Cys	Val	Lys	Glu	Asn	Ser
					85					90			95
Asp	Leu	Lys	Lys	Ser	Phe	Lys	Ser	Pro	Glu	Pro	Arg	Leu	Phe
					100				105				110
Glu	Glu	Phe	Phe	Arg	Ile	Phe	Asn	Arg	Ser	Ile	Asp	Ala	Phe
					115				120				125
Phe	Val	Val	Ala	Ser	Glu	Thr	Ser	Asp	Cys	Val	Val	Ser	Ser
					130				135			140	Thr
Ser	Pro	Glu	Lys	Asp	Ser	Arg	Val	Ser	Val	Thr	Lys	Pro	Phe
145					150					155			Met
Pro	Pro	Val	Ala	Ala	Ser	Ser	Leu	Arg	Asn	Asp	Ser	Ser	Ser
					165				170				175
Arg	Lys	Ala	Lys	Asn	Pro	Pro	Gly	Asp	Ser	Ser	Leu	His	Trp
					180				185				190
Met	Ala	Leu	Pro	Ala	Leu	Phe	Ser	Leu	Ile	Ile	Gly	Phe	Ala
					195				200				205
Ala	Leu	Tyr	Trp	Lys	Lys	Arg	Gln	Pro	Ser	Leu	Thr	Arg	Ala
					210							220	Val
Asn	Ile	Gln	Ile	Asn	Glu	Glu	Asp	Asn	Glu	Ile	Ser	Met	Leu
225					230					235			Gln
Lys	Glu	Arg	Glu	Phe	Gln	Glu	Val						Glu
					245								

<210> 503  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

Glu	Gly	Ile	Cys	Arg	Asn	Arg	Val	Thr	Asn	Asn	Val	Lys	Asp	Val	Thr
1			5						10					15	
Lys	Leu	Val	Ala	Asn	Leu	Pro	Lys	Asp	Tyr	Met	Ile	Thr	Leu	Lys	Tyr
			20						25				30		
Val	Ser	Gly	Met	Asp	Val	Leu	Pro	Ser	His	Cys	Trp	Ile	Ser	Glu	Met
			35						40				45		
Val	Val	Gln	Leu	Ser	Asp	Ser	Leu	Thr	Asp	Leu	Leu	Asp	Lys	Phe	Ser
			50						55			60			
Asn	Ile	Ser	Glu	Gly	Leu	Ser	Asn	Tyr	Ser	Ile	Ile	Asp	Lys	Leu	Val
65					70					75				80	
Asn	Ile	Val	Asp	Asp	Leu	Val	Glu	Cys	Val	Lys	Glu	Asn	Ser	Ser	Lys
					85					90				95	
Asp	Leu	Lys	Lys	Ser	Phe	Lys	Ser	Pro	Glu	Pro	Arg	Leu	Phe	Thr	Pro
					100				105				110		
Glu	Glu	Phe	Phe	Arg	Ile	Phe	Asn	Arg	Ser	Ile	Asp	Ala	Phe	Lys	Asp
					115				120				125		
Phe	Val	Val	Ala	Ser	Glu	Thr	Ser	Asp	Cys	Val	Val	Ser	Ser	Thr	Leu
					130				135			140			
Ser	Pro	Glu	Lys	Asp	Ser	Arg	Val	Ser	Val	Thr	Lys	Pro	Phe	Met	Leu
145					150					155				160	
Pro	Pro	Val	Ala	Ala	Ser	Ser	Leu	Arg	Asn	Asp	Ser	Ser	Ser	Ser	Asn
					165				170					175	
Arg	Lys	Ala	Lys	Asn	Pro	Pro	Gly	Asp	Ser	Ser	Leu	His	Trp	Ala	Ala



Val Val Gln Leu Ser Asp Ser Leu Thr Asp Leu Leu Asp Lys Phe Ser  
 50 55 60  
 Asn Ile Ser Glu Gly Leu Ser Asn Tyr Ser Ile Ile Asp Lys Leu Val  
 65 70 75 80  
 Asn Ile Val Asp Asp Leu Val Glu Cys Val Lys Glu Asn Ser Ser Lys  
 85 90 95  
 Asp Leu Lys Lys Ser Phe Lys Ser Pro Glu Pro Arg Leu Phe Thr Pro  
 100 105 110  
 Glu Glu Phe Phe Arg Ile Phe Asn Arg Ser Ile Asp Ala Phe Lys Asp  
 115 120 125  
 Phe Val Val Ala Ser Glu Thr Ser Asp Cys Val Val Ser Ser Thr Leu  
 130 135 140  
 Ser Pro Glu Lys Asp Ser Arg Val Ser Val Thr Lys Pro Phe Met Leu  
 145 150 155 160  
 Pro Pro Val Ala Ala Ser Ser Leu Arg Asn Asp Ser Ser Ser Ser Asn  
 165 170 175  
 Arg Lys Ala Lys Asn Pro Pro Gly Asp Ser Ser Leu His Trp Ala Ala  
 180 185 190  
 Met Ala Leu Pro Ala Leu Phe Ser Leu Ile Ile Gly Phe Ala Phe Gly  
 195 200 205  
 Ala Leu Tyr Trp Lys Lys Arg Gln Pro Ser Leu Thr Arg Ala Val Glu  
 210 215 220  
 Asn Ile Gln Ile Asn Glu Glu Asp Asn Glu Ile Ser Met Leu Gln Glu  
 225 230 235 240  
 Lys Glu Arg Glu Phe Gln Glu Val  
 245

<210> 506  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 506  
 Glu Gly Ile Cys Arg Asn Arg Val Thr Asn Asn Val Lys Asp Val Thr  
 1 5 10 15  
 Lys Leu Val Ala Asn Leu Pro Lys Asp Tyr Met Ile Thr Leu Lys Tyr  
 20 25 30  
 Val Pro Gly Met Asn Val Leu Pro Ser His Cys Trp Ile Ser Glu Met  
 35 40 45  
 Val Val Gln Leu Ser Asp Ser Leu Thr Asp Leu Leu Asp Lys Phe Ser  
 50 55 60  
 Asn Ile Ser Glu Gly Leu Ser Asn Tyr Ser Ile Ile Asp Lys Leu Val  
 65 70 75 80  
 Asn Ile Val Asp Asp Leu Val Glu Cys Val Lys Glu Asn Ser Ser Lys  
 85 90 95  
 Asp Leu Lys Lys Ser Phe Lys Ser Pro Glu Pro Arg Leu Phe Thr Pro  
 100 105 110  
 Glu Glu Phe Phe Arg Ile Phe Asn Arg Ser Ile Asp Ala Phe Lys Asp  
 115 120 125  
 Phe Val Val Ala Ser Glu Thr Ser Asp Cys Val Val Ser Ser Thr Leu  
 130 135 140  
 Ser Pro Glu Lys Asp Ser Arg Val Ser Val Thr Lys Pro Phe Met Leu  
 145 150 155 160  
 Pro Pro Val Ala Ala Ser Ser Leu Arg Asn Asp Ser Ser Ser Ser Asn  
 165 170 175  
 Arg Lys Ala Lys Asn Pro Pro Gly Asp Ser Ser Leu His Trp Ala Ala  
 180 185 190  
 Met Ala Leu Pro Ala Leu Phe Ser Leu Ile Ile Gly Phe Ala Phe Gly  
 195 200 205  
 Ala Leu Tyr Trp Lys Lys Arg Gln Pro Ser Leu Thr Arg Ala Val Glu  
 210 215 220  
 Asn Ile Gln Ile Asn Glu Glu Asp Asn Glu Ile Ser Met Leu Gln Glu  
 235

225  
Lys Glu Arg Glu Phe Gln Glu Val  
245

235 240

<210> 507  
<211> 248  
<212> PRT  
<213> Homo sapiens

<400> 507  
Glu Gly Ile Cys Arg Asn Arg Val Thr Asn Asn Val Lys Asp Val Thr  
1 5 10 15  
Lys Leu Val Ala Asn Leu Pro Lys Asp Tyr Met Ile Thr Leu Lys Tyr  
20 25 30  
Val Pro Gly Met Asp Val Leu Pro Ser His Cys Trp Ile Ser Glu Met  
35 40 45  
Val Val Gln Leu Ser Gln Ser Leu Thr Asp Leu Leu Asp Lys Phe Ser  
50 55 60  
Asn Ile Ser Glu Gly Leu Ser Asn Tyr Ser Ile Ile Asp Lys Leu Val  
65 70 75 80  
Asn Ile Val Asp Asp Leu Val Glu Cys Val Lys Glu Asn Ser Ser Lys  
85 90 95  
Asp Leu Lys Lys Ser Phe Lys Ser Pro Glu Pro Arg Leu Phe Thr Pro  
100 105 110  
Glu Glu Phe Phe Arg Ile Phe Asn Arg Ser Ile Asp Ala Phe Lys Asp  
115 120 125  
Phe Val Val Ala Ser Glu Thr Ser Asp Cys Val Val Ser Ser Thr Leu  
130 135 140  
Ser Pro Glu Lys Asp Ser Arg Val Ser Val Thr Lys Pro Phe Met Leu  
145 150 155 160  
Pro Pro Val Ala Ala Ser Ser Leu Arg Asn Asp Ser Ser Ser Ser Asn  
165 170 175  
Arg Lys Ala Lys Asn Pro Pro Gly Asp Ser Ser Leu His Trp Ala Ala  
180 185 190  
Met Ala Leu Pro Ala Leu Phe Ser Leu Ile Ile Gly Phe Ala Phe Gly  
195 200 205  
Ala Leu Tyr Trp Lys Lys Arg Gln Pro Ser Leu Thr Arg Ala Val Glu  
210 215 220  
Asn Ile Gln Ile Asn Glu Glu Asp Asn Glu Ile Ser Met Leu Gln Glu  
225 230 235 240  
Lys Glu Arg Glu Phe Gln Glu Val  
245

<210> 508  
<211> 248  
<212> PRT  
<213> Homo sapiens

<400> 508  
Glu Gly Ile Cys Arg Asn Arg Val Thr Asn Asn Val Lys Asp Val Thr  
1 5 10 15  
Lys Leu Val Ala Asn Leu Pro Lys Asp Tyr Met Ile Thr Leu Lys Tyr  
20 25 30  
Val Pro Gly Met Asp Val Leu Pro Ser His Cys Trp Ile Ser Glu Met  
35 40 45  
Val Val Gln Leu Ser Asn Ser Leu Thr Asp Leu Leu Asp Lys Phe Ser  
50 55 60  
Asn Ile Ser Glu Gly Leu Ser Asn Tyr Ser Ile Ile Asp Lys Leu Val  
65 70 75 80  
Asn Ile Val Asp Asp Leu Val Glu Cys Val Lys Glu Asn Ser Ser Lys  
85 90 95



Asp	Leu	Lys	Lys	Ser	Phe	Lys	Ser	Pro	Glu	Pro	Arg	Leu	Phe	Thr	Pro
		100						105					110		
Glu	Glu	Phe	Phe	Arg	Ile	Phe	Asn	Arg	Ser	Ile	Asp	Ala	Phe	Lys	Asp
		115					120					125			
Phe	Val	Val	Ala	Ser	Glu	Thr	Ser	Asp	Cys	Val	Val	Ser	Ser	Thr	Leu
		130				135					140				
Ser	Pro	Glu	Lys	Asp	Ser	Arg	Val	Ser	Val	Thr	Lys	Pro	Phe	Met	Leu
145				150						155					160
Pro	Pro	Val	Ala	Ala	Ser	Ser	Leu	Arg	Asn	Asp	Ser	Ser	Ser	Ser	Asn
			165					170							175
Arg	Lys	Ala	Lys	Asn	Pro	Pro	Gly	Asp	Ser	Ser	Leu	His	Trp	Ala	Ala
			180					185					190		
Met	Ala	Leu	Pro	Ala	Leu	Phe	Ser	Leu	Ile	Ile	Gly	Phe	Ala	Phe	Gly
		195				200						205			
Ala	Leu	Tyr	Trp	Lys	Lys	Arg	Gln	Pro	Ser	Leu	Thr	Arg	Ala	Val	Glu
		210				215					220				
Asn	Ile	Gln	Ile	Asn	Glu	Glu	Asp	Asn	Glu	Ile	Ser	Met	Leu	Gln	Glu
225					230					235					240
Lys	Glu	Arg	Glu	Phe	Gln	Glu	Val								
					245										

<210> 509  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 509															
Glu	Gly	Ile	Cys	Arg	Asn	Arg	Val	Thr	Asn	Asn	Val	Lys	Asp	Val	Thr
1				5					10					15	
Lys	Leu	Val	Ala	Asn	Leu	Pro	Lys	Asp	Tyr	Met	Ile	Thr	Leu	Lys	Tyr
			20					25					30		
Val	Pro	Gly	Met	Asp	Val	Leu	Pro	Ser	His	Cys	Trp	Ile	Ser	Glu	Met
		35				40						45			
Val	Val	Gln	Leu	Ser	Asp	Ser	Leu	Thr	Gln	Leu	Leu	Asp	Lys	Phe	Ser
		50				55					60				
Asn	Ile	Ser	Glu	Gly	Leu	Ser	Asn	Tyr	Ser	Ile	Ile	Asp	Lys	Leu	Val
65					70					75					80
Asn	Ile	Val	Asp	Asp	Leu	Val	Glu	Cys	Val	Lys	Glu	Asn	Ser	Ser	Lys
			85						90					95	
Asp	Leu	Lys	Lys	Ser	Phe	Lys	Ser	Pro	Glu	Pro	Arg	Leu	Phe	Thr	Pro
			100					105					110		
Glu	Glu	Phe	Phe	Arg	Ile	Phe	Asn	Arg	Ser	Ile	Asp	Ala	Phe	Lys	Asp
		115					120					125			
Phe	Val	Val	Ala	Ser	Glu	Thr	Ser	Asp	Cys	Val	Val	Ser	Ser	Thr	Leu
		130				135					140				
Ser	Pro	Glu	Lys	Asp	Ser	Arg	Val	Ser	Val	Thr	Lys	Pro	Phe	Met	Leu
145				150						155					160
Pro	Pro	Val	Ala	Ala	Ser	Ser	Leu	Arg	Asn	Asp	Ser	Ser	Ser	Ser	Asn
			165					170							175
Arg	Lys	Ala	Lys	Asn	Pro	Pro	Gly	Asp	Ser	Ser	Leu	His	Trp	Ala	Ala
			180					185					190		
Met	Ala	Leu	Pro	Ala	Leu	Phe	Ser	Leu	Ile	Ile	Gly	Phe	Ala	Phe	Gly
		195				200						205			
Ala	Leu	Tyr	Trp	Lys	Lys	Arg	Gln	Pro	Ser	Leu	Thr	Arg	Ala	Val	Glu
		210				215					220				
Asn	Ile	Gln	Ile	Asn	Glu	Glu	Asp	Asn	Glu	Ile	Ser	Met	Leu	Gln	Glu
225					230					235					240
Lys	Glu	Arg	Glu	Phe	Gln	Glu	Val								
					245										

<210> 510

<211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 510

Glu	Gly	Ile	Cys	Arg	Asn	Arg	Val	Thr	Asn	Asn	Val	Lys	Asp	Val	Thr
1				5					10					15	
Lys	Leu	Val	Ala	Asn	Leu	Pro	Lys	Asp	Tyr	Met	Ile	Thr	Leu	Lys	Tyr
		20						25					30		
Val	Pro	Gly	Met	Asp	Val	Leu	Pro	Ser	His	Cys	Trp	Ile	Ser	Glu	Met
		35				40						45			
Val	Val	Gln	Leu	Ser	Asp	Ser	Leu	Thr	Asn	Leu	Leu	Asp	Lys	Phe	Ser
		50				55					60				
Asn	Ile	Ser	Glu	Gly	Leu	Ser	Asn	Tyr	Ser	Ile	Ile	Asp	Lys	Leu	Val
65					70					75				80	
Asn	Ile	Val	Asp	Asp	Leu	Val	Glu	Cys	Val	Lys	Glu	Asn	Ser	Ser	Lys
			85						90					95	
Asp	Leu	Lys	Lys	Ser	Phe	Lys	Ser	Pro	Glu	Pro	Arg	Leu	Phe	Thr	Pro
			100					105					110		
Glu	Glu	Phe	Phe	Arg	Ile	Phe	Asn	Arg	Ser	Ile	Asp	Ala	Phe	Lys	Asp
		115					120					125			
Phe	Val	Val	Ala	Ser	Glu	Thr	Ser	Asp	Cys	Val	Val	Ser	Ser	Thr	Leu
		130				135					140				
Ser	Pro	Glu	Lys	Asp	Ser	Arg	Val	Ser	Val	Thr	Lys	Pro	Phe	Met	Leu
145					150					155				160	
Pro	Pro	Val	Ala	Ala	Ser	Ser	Leu	Arg	Asn	Asp	Ser	Ser	Ser	Ser	Asn
			165						170					175	
Arg	Lys	Ala	Lys	Asn	Pro	Pro	Gly	Asp	Ser	Ser	Leu	His	Trp	Ala	Ala
			180					185						190	
Met	Ala	Leu	Pro	Ala	Leu	Phe	Ser	Leu	Ile	Ile	Gly	Phe	Ala	Phe	Gly
		195					200					205			
Ala	Leu	Tyr	Trp	Lys	Lys	Arg	Gln	Pro	Ser	Leu	Thr	Arg	Ala	Val	Glu
		210				215					220				
Asn	Ile	Gln	Ile	Asn	Glu	Glu	Asp	Asn	Glu	Ile	Ser	Met	Leu	Gln	Glu
225					230					235				240	
Lys	Glu	Arg	Glu	Phe	Gln	Glu	Val								
				245											

<210> 511  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 511

Glu	Gly	Ile	Cys	Arg	Asn	Arg	Val	Thr	Asn	Asn	Val	Lys	Asp	Val	Thr
1				5					10					15	
Lys	Leu	Val	Ala	Asn	Leu	Pro	Lys	Asp	Tyr	Met	Ile	Thr	Leu	Lys	Tyr
		20						25					30		
Val	Pro	Gly	Met	Asp	Val	Leu	Pro	Ser	His	Cys	Trp	Ile	Ser	Glu	Met
		35				40						45			
Val	Val	Gln	Leu	Ser	Asp	Ser	Leu	Thr	Asp	Leu	Leu	Gln	Lys	Phe	Ser
		50				55					60				
Asn	Ile	Ser	Glu	Gly	Leu	Ser	Asn	Tyr	Ser	Ile	Ile	Asp	Lys	Leu	Val
65					70					75				80	
Asn	Ile	Val	Asp	Asp	Leu	Val	Glu	Cys	Val	Lys	Glu	Asn	Ser	Ser	Lys
			85						90					95	
Asp	Leu	Lys	Lys	Ser	Phe	Lys	Ser	Pro	Glu	Pro	Arg	Leu	Phe	Thr	Pro
			100					105					110		
Glu	Glu	Phe	Phe	Arg	Ile	Phe	Asn	Arg	Ser	Ile	Asp	Ala	Phe	Lys	Asp
		115					120					125			
Phe	Val	Val	Ala	Ser	Glu	Thr	Ser	Asp	Cys	Val	Val	Ser	Ser	Thr	Leu
		130				135					140				

Ser Pro Glu Lys Asp Arg Val Ser Val Thr Lys Pro Phe Leu  
 145 150 155 160  
 Pro Pro Val Ala Ala Ser Ser Leu Arg Asn Asp Ser Ser Ser Asn  
 165 170 175  
 Arg Lys Ala Lys Asn Pro Pro Gly Asp Ser Ser Leu His Trp Ala Ala  
 180 185 190  
 Met Ala Leu Pro Ala Leu Phe Ser Leu Ile Ile Gly Phe Ala Phe Gly  
 195 200 205  
 Ala Leu Tyr Trp Lys Lys Arg Gln Pro Ser Leu Thr Arg Ala Val Glu  
 210 215 220  
 Asn Ile Gln Ile Asn Glu Glu Asp Asn Glu Ile Ser Met Leu Gln Glu  
 225 230 235 240  
 Lys Glu Arg Glu Phe Gln Glu Val  
 245

<210> 512  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 512  
 Glu Gly Ile Cys Arg Asn Arg Val Thr Asn Asn Val Lys Asp Val Thr  
 1 5 10 15  
 Lys Leu Val Ala Asn Leu Pro Lys Asp Tyr Met Ile Thr Leu Lys Tyr  
 20 25 30  
 Val Pro Gly Met Asp Val Leu Pro Ser His Cys Trp Ile Ser Glu Met  
 35 40 45  
 Val Val Gln Leu Ser Asp Ser Leu Thr Asp Leu Leu Asn Lys Phe Ser  
 50 55 60  
 Asn Ile Ser Glu Gly Leu Ser Asn Tyr Ser Ile Ile Asp Lys Leu Val  
 65 70 75 80  
 Asn Ile Val Asp Asp Leu Val Glu Cys Val Lys Glu Asn Ser Ser Lys  
 85 90 95  
 Asp Leu Lys Lys Ser Phe Lys Ser Pro Glu Pro Arg Leu Phe Thr Pro  
 100 105 110  
 Glu Glu Phe Phe Arg Ile Phe Asn Arg Ser Ile Asp Ala Phe Lys Asp  
 115 120 125  
 Phe Val Val Ala Ser Glu Thr Ser Asp Cys Val Val Ser Ser Thr Leu  
 130 135 140  
 Ser Pro Glu Lys Asp Ser Arg Val Ser Val Thr Lys Pro Phe Met Leu  
 145 150 155 160  
 Pro Pro Val Ala Ala Ser Ser Leu Arg Asn Asp Ser Ser Ser Asn  
 165 170 175  
 Arg Lys Ala Lys Asn Pro Pro Gly Asp Ser Ser Leu His Trp Ala Ala  
 180 185 190  
 Met Ala Leu Pro Ala Leu Phe Ser Leu Ile Ile Gly Phe Ala Phe Gly  
 195 200 205  
 Ala Leu Tyr Trp Lys Lys Arg Gln Pro Ser Leu Thr Arg Ala Val Glu  
 210 215 220  
 Asn Ile Gln Ile Asn Glu Glu Asp Asn Glu Ile Ser Met Leu Gln Glu  
 225 230 235 240  
 Lys Glu Arg Glu Phe Gln Glu Val  
 245

<210> 513  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 513  
 Glu Gly Ile Cys Arg Asn Arg Val Thr Asn Asn Val Lys Asp Val Thr



Met Ala Leu Pro Ala Phe Ser Leu Ile Ile Gly Phe Ala Gly  
 195 200 205  
 Ala Leu Tyr Trp Lys Lys Arg Gln Pro Ser Leu Thr Arg Ala Val Glu  
 210 215 220  
 Asn Ile Gln Ile Asn Glu Glu Asp Asn Glu Ile Ser Met Leu Gln Glu  
 225 230 235 240  
 Lys Glu Arg Glu Phe Gln Glu Val  
 245

<210> 515  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 515  
 Glu Gly Ile Cys Arg Asn Arg Val Thr Asn Asn Val Lys Asp Val Thr  
 1 5 10 15  
 Lys Leu Val Ala Asn Leu Pro Lys Asp Tyr Met Ile Thr Leu Lys Tyr  
 20 25 30  
 Val Pro Gly Met Asp Val Leu Pro Ser His Cys Trp Ile Ser Glu Met  
 35 40 45  
 Val Val Gln Leu Ser Asp Ser Leu Thr Asp Leu Leu Asp Lys Ile Ser  
 50 55 60  
 Asn Ile Ser Glu Gly Leu Ser Asn Tyr Ser Ile Ile Asp Lys Leu Val  
 65 70 75 80  
 Asn Ile Val Asp Asp Leu Val Glu Cys Val Lys Glu Asn Ser Ser Lys  
 85 90 95  
 Asp Leu Lys Lys Ser Phe Lys Ser Pro Glu Pro Arg Leu Phe Thr Pro  
 100 105 110  
 Glu Glu Phe Phe Arg Ile Phe Asn Arg Ser Ile Asp Ala Phe Lys Asp  
 115 120 125  
 Phe Val Val Ala Ser Glu Thr Ser Asp Cys Val Val Ser Ser Thr Leu  
 130 135 140  
 Ser Pro Glu Lys Asp Ser Arg Val Ser Val Thr Lys Pro Phe Met Leu  
 145 150 155 160  
 Pro Pro Val Ala Ala Ser Ser Leu Arg Asn Asp Ser Ser Ser Ser Asn  
 165 170 175  
 Arg Lys Ala Lys Asn Pro Pro Gly Asp Ser Ser Leu His Trp Ala Ala  
 180 185 190  
 Met Ala Leu Pro Ala Leu Phe Ser Leu Ile Ile Gly Phe Ala Phe Gly  
 195 200 205  
 Ala Leu Tyr Trp Lys Lys Arg Gln Pro Ser Leu Thr Arg Ala Val Glu  
 210 215 220  
 Asn Ile Gln Ile Asn Glu Glu Asp Asn Glu Ile Ser Met Leu Gln Glu  
 225 230 235 240  
 Lys Glu Arg Glu Phe Gln Glu Val  
 245

<210> 516  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 516  
 Glu Gly Ile Cys Arg Asn Arg Val Thr Asn Asn Val Lys Asp Val Thr  
 1 5 10 15  
 Lys Leu Val Ala Asn Leu Pro Lys Asp Tyr Met Ile Thr Leu Lys Tyr  
 20 25 30  
 Val Pro Gly Met Asp Val Leu Pro Ser His Cys Trp Ile Ser Glu Met  
 35 40 45  
 Val Val Gln Leu Ser Asp Ser Leu Thr Asp Leu Leu Asp Lys Val Ser

50	Asn	Ile	Ser	Glu	Gly	Leu	Ser	Asn	Tyr	Ser	Ile	Ile	Asp	Lys	Leu	Val
65	Asn	Ile	Val	Asp	Asp	Leu	Val	Glu	Cys	Val	Lys	Glu	Asn	Ser	Ser	Lys
85	Asp	Leu	Lys	Lys	Ser	Phe	Lys	Ser	Pro	Glu	Pro	Arg	Leu	Phe	Thr	Pro
100	Glu	Glu	Phe	Phe	Arg	Ile	Phe	Asn	Arg	Ser	Ile	Asp	Ala	Phe	Lys	Asp
115	Phe	Val	Val	Ala	Ser	Glu	Thr	Ser	Asp	Cys	Val	Val	Ser	Ser	Thr	Leu
130	Ser	Pro	Glu	Lys	Asp	Ser	Arg	Val	Ser	Val	Thr	Lys	Pro	Phe	Met	Leu
145	Pro	Pro	Val	Ala	Ala	Ser	Ser	Leu	Arg	Asn	Asp	Ser	Ser	Ser	Ser	Asn
165	Arg	Lys	Ala	Lys	Asn	Pro	Pro	Gly	Asp	Ser	Ser	Leu	His	Trp	Ala	Ala
180	Met	Ala	Leu	Pro	Ala	Leu	Phe	Ser	Leu	Ile	Ile	Gly	Phe	Ala	Phe	Gly
195	Ala	Leu	Tyr	Trp	Lys	Lys	Arg	Gln	Pro	Ser	Leu	Thr	Arg	Ala	Val	Glu
210	Asn	Ile	Gln	Ile	Asn	Glu	Glu	Asp	Asn	Glu	Ile	Ser	Met	Leu	Gln	Glu
225	Lys	Glu	Arg	Glu	Phe	Gln	Glu	Val								
245																

<210> 517  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 517	Glu	Gly	Ile	Cys	Arg	Asn	Arg	Val	Thr	Asn	Asn	Val	Lys	Asp	Val	Thr
1	Lys	Leu	Val	Ala	Asn	Leu	Pro	Lys	Asp	Tyr	Met	Ile	Thr	Leu	Lys	Tyr
20	Val	Pro	Gly	Met	Asp	Val	Leu	Pro	Ser	His	Cys	Trp	Ile	Ser	Glu	Met
35	Val	Val	Gln	Leu	Ser	Asp	Ser	Leu	Thr	Asp	Leu	Leu	Asp	Lys	Phe	Ser
50	Asn	Ile	Ser	Glu	Gly	Leu	Ser	Asn	Tyr	Ser	Ile	Ile	Asp	Lys	Leu	Val
65	Asn	Ile	Val	Asp	Asp	Leu	Val	Glu	Cys	Val	Lys	Glu	Asn	Ser	Ser	Gln
85	Asp	Leu	Lys	Lys	Ser	Phe	Lys	Ser	Pro	Glu	Pro	Arg	Leu	Phe	Thr	Pro
100	Glu	Glu	Phe	Phe	Arg	Ile	Phe	Asn	Arg	Ser	Ile	Asp	Ala	Phe	Lys	Asp
115	Phe	Val	Val	Ala	Ser	Glu	Thr	Ser	Asp	Cys	Val	Val	Ser	Ser	Thr	Leu
130	Ser	Pro	Glu	Lys	Asp	Ser	Arg	Val	Ser	Val	Thr	Lys	Pro	Phe	Met	Leu
145	Pro	Pro	Val	Ala	Ala	Ser	Ser	Leu	Arg	Asn	Asp	Ser	Ser	Ser	Ser	Asn
165	Arg	Lys	Ala	Lys	Asn	Pro	Pro	Gly	Asp	Ser	Ser	Leu	His	Trp	Ala	Ala
180	Met	Ala	Leu	Pro	Ala	Leu	Phe	Ser	Leu	Ile	Ile	Gly	Phe	Ala	Phe	Gly
195	Ala	Leu	Tyr	Trp	Lys	Lys	Arg	Gln	Pro	Ser	Leu	Thr	Arg	Ala	Val	Glu
210	Asn	Ile	Gln	Ile	Asn	Glu	Glu	Asp	Asn	Glu	Ile	Ser	Met	Leu	Gln	Glu
225																
230																
235																
240																

Lys Glu Arg Glu Phe      Glu Val  
245

<210> 518  
<211> 248  
<212> PRT  
<213> Homo sapiens

<400> 518  
Glu Gly Ile Cys Arg Asn Arg Val Thr Asn Asn Val Lys Asp Val Thr  
1                      5                      10                      15  
Lys Leu Val Ala Asn Leu Pro Lys Asp Tyr Met Ile Thr Leu Lys Tyr  
                    20                      25                      30  
Val Pro Gly Met Asp Val Leu Pro Ser His Cys Trp Ile Ser Glu Met  
                    35                      40                      45  
Val Val Gln Leu Ser Asp Ser Leu Thr Asp Leu Leu Asp Lys Phe Ser  
                    50                      55                      60  
Asn Ile Ser Glu Gly Leu Ser Asn Tyr Ser Ile Ile Asp Lys Leu Val  
65                      70                      75                      80  
Asn Ile Val Asp Asp Leu Val Glu Cys Val Lys Glu Asn Ser Ser Asn  
                    85                      90                      95  
Asp Leu Lys Lys Ser Phe Lys Ser Pro Glu Pro Arg Leu Phe Thr Pro  
                    100                      105                      110  
Glu Glu Phe Phe Arg Ile Phe Asn Arg Ser Ile Asp Ala Phe Lys Asp  
                    115                      120                      125  
Phe Val Val Ala Ser Glu Thr Ser Asp Cys Val Val Ser Ser Thr Leu  
                    130                      135                      140  
Ser Pro Glu Lys Asp Ser Arg Val Ser Val Thr Lys Pro Phe Met Leu  
145                      150                      155                      160  
Pro Pro Val Ala Ala Ser Ser Leu Arg Asn Asp Ser Ser Ser Ser Asn  
                    165                      170                      175  
Arg Lys Ala Lys Asn Pro Pro Gly Asp Ser Ser Leu His Trp Ala Ala  
                    180                      185                      190  
Met Ala Leu Pro Ala Leu Phe Ser Leu Ile Ile Gly Phe Ala Phe Gly  
                    195                      200                      205  
Ala Leu Tyr Trp Lys Lys Arg Gln Pro Ser Leu Thr Arg Ala Val Glu  
210                      215                      220  
Asn Ile Gln Ile Asn Glu Glu Asp Asn Glu Ile Ser Met Leu Gln Glu  
225                      230                      235                      240  
Lys Glu Arg Glu Phe Gln Glu Val  
245

<210> 519  
<211> 248  
<212> PRT  
<213> Homo sapiens

<400> 519  
Glu Gly Ile Cys Arg Asn Arg Val Thr Asn Asn Val Lys Asp Val Thr  
1                      5                      10                      15  
Lys Leu Val Ala Asn Leu Pro Lys Asp Tyr Met Ile Thr Leu Lys Tyr  
                    20                      25                      30  
Val Pro Gly Met Asp Val Leu Pro Ser His Cys Trp Ile Ser Glu Met  
                    35                      40                      45  
Val Val Gln Leu Ser Asp Ser Leu Thr Asp Leu Leu Asp Lys Phe Ser  
                    50                      55                      60  
Asn Ile Ser Glu Gly Leu Ser Asn Tyr Ser Ile Ile Asp Lys Leu Val  
65                      70                      75                      80  
Asn Ile Val Asp Asp Leu Val Glu Cys Val Lys Glu Asn Ser Ser Lys  
                    85                      90                      95  
Asp Val Lys Lys Ser Phe Lys Ser Pro Glu Pro Arg Leu Phe Thr Pro





<212> PRT  
<213> Homo sapiens

<400> 521

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Glu Gly Ile Cys Arg Asn Arg Val Thr Asn Asn Val Lys Asp Val Thr
 1              5              10              15
Lys Leu Val Ala Asn Leu Pro Lys Asp Tyr Met Ile Thr Leu Lys Tyr
      20              25              30
Val Pro Gly Met Asp Val Leu Pro Ser His Cys Trp Ile Ser Glu Met
      35              40              45
Val Val Gln Leu Ser Asp Ser Leu Thr Asp Leu Leu Asp Lys Phe Ser
      50              55              60
Asn Ile Ser Glu Gly Leu Ser Asn Tyr Ser Ile Ile Asp Lys Leu Val
      65              70              75              80
Asn Ile Val Asp Asp Leu Val Glu Cys Val Lys Glu Asn Ser Ser Lys
      85              90              95
Asp Leu Gln Lys Ser Phe Lys Ser Pro Glu Pro Arg Leu Phe Thr Pro
      100             105             110
Glu Glu Phe Phe Arg Ile Phe Asn Arg Ser Ile Asp Ala Phe Lys Asp
      115             120             125
Phe Val Val Ala Ser Glu Thr Ser Asp Cys Val Val Ser Ser Thr Leu
      130             135             140
Ser Pro Glu Lys Asp Ser Arg Val Ser Val Thr Lys Pro Phe Met Leu
      145             150             155             160
Pro Pro Val Ala Ala Ser Ser Leu Arg Asn Asp Ser Ser Ser Ser Asn
      165             170             175
Arg Lys Ala Lys Asn Pro Pro Gly Asp Ser Ser Leu His Trp Ala Ala
      180             185             190
Met Ala Leu Pro Ala Leu Phe Ser Leu Ile Ile Gly Phe Ala Phe Gly
      195             200             205
Ala Leu Tyr Trp Lys Lys Arg Gln Pro Ser Leu Thr Arg Ala Val Glu
      210             215             220
Asn Ile Gln Ile Asn Glu Glu Asp Asn Glu Ile Ser Met Leu Gln Glu
      225             230             235             240
Lys Glu Arg Glu Phe Gln Glu Val
      245
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<210> 522  
<211> 248  
<212> PRT  
<213> Homo sapiens

<400> 522

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Glu Gly Ile Cys Arg Asn Arg Val Thr Asn Asn Val Lys Asp Val Thr
 1              5              10              15
Lys Leu Val Ala Asn Leu Pro Lys Asp Tyr Met Ile Thr Leu Lys Tyr
      20              25              30
Val Pro Gly Met Asp Val Leu Pro Ser His Cys Trp Ile Ser Glu Met
      35              40              45
Val Val Gln Leu Ser Asp Ser Leu Thr Asp Leu Leu Asp Lys Phe Ser
      50              55              60
Asn Ile Ser Glu Gly Leu Ser Asn Tyr Ser Ile Ile Asp Lys Leu Val
      65              70              75              80
Asn Ile Val Asp Asp Leu Val Glu Cys Val Lys Glu Asn Ser Ser Lys
      85              90              95
Asp Leu Asn Lys Ser Phe Lys Ser Pro Glu Pro Arg Leu Phe Thr Pro
      100             105             110
Glu Glu Phe Phe Arg Ile Phe Asn Arg Ser Ile Asp Ala Phe Lys Asp
      115             120             125
Phe Val Val Ala Ser Glu Thr Ser Asp Cys Val Val Ser Ser Thr Leu
      130             135             140
Ser Pro Glu Lys Asp Ser Arg Val Ser Val Thr Lys Pro Phe Met Leu
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Lys Leu Val Ala Asn Ser Pro Lys Asp Tyr Met Ile Thr Leu Lys Tyr  
 20 25 30  
 Val Pro Gly Met Asp Val Leu Pro Ser His Cys Trp Ile Ser Glu Met  
 35 40 45  
 Val Val Gln Leu Ser Asp Ser Leu Thr Asp Leu Leu Asp Lys Phe Ser  
 50 55 60  
 Asn Ile Ser Glu Gly Leu Ser Asn Tyr Ser Ile Ile Asp Lys Leu Val  
 65 70 75 80  
 Asn Ile Val Asp Asp Leu Val Glu Cys Val Lys Glu Asn Ser Ser Lys  
 85 90 95  
 Asp Leu Lys Asn Ser Phe Lys Ser Pro Glu Pro Arg Leu Phe Thr Pro  
 100 105 110  
 Glu Glu Phe Phe Arg Ile Phe Asn Arg Ser Ile Asp Ala Phe Lys Asp  
 115 120 125  
 Phe Val Val Ala Ser Glu Thr Ser Asp Cys Val Val Ser Ser Thr Leu  
 130 135 140  
 Ser Pro Glu Lys Asp Ser Arg Val Ser Val Thr Lys Pro Phe Met Leu  
 145 150 155 160  
 Pro Pro Val Ala Ala Ser Ser Leu Arg Asn Asp Ser Ser Ser Ser Asn  
 165 170 175  
 Arg Lys Ala Lys Asn Pro Pro Gly Asp Ser Ser Leu His Trp Ala Ala  
 180 185 190  
 Met Ala Leu Pro Ala Leu Phe Ser Leu Ile Ile Gly Phe Ala Phe Gly  
 195 200 205  
 Ala Leu Tyr Trp Lys Lys Arg Gln Pro Ser Leu Thr Arg Ala Val Glu  
 210 215 220  
 Asn Ile Gln Ile Asn Glu Asp Asn Glu Ile Ser Met Leu Gln Glu  
 225 230 235 240  
 Lys Glu Arg Glu Phe Gln Glu Val  
 245

<210> 525  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 525  
 Glu Gly Ile Cys Arg Asn Arg Val Thr Asn Asn Val Lys Asp Val Thr  
 1 5 10 15  
 Lys Leu Val Ala Asn Leu Pro Lys Asp Tyr Met Ile Thr Leu Lys Tyr  
 20 25 30  
 Val Pro Gly Met Asp Val Leu Pro Ser His Cys Trp Ile Ser Glu Met  
 35 40 45  
 Val Val Gln Leu Ser Asp Ser Leu Thr Asp Leu Leu Asp Lys Phe Ser  
 50 55 60  
 Asn Ile Ser Glu Gly Leu Ser Asn Tyr Ser Ile Ile Asp Lys Leu Val  
 65 70 75 80  
 Asn Ile Val Asp Asp Leu Val Glu Cys Val Lys Glu Asn Ser Ser Lys  
 85 90 95  
 Asp Leu Lys Lys Ser Ile Lys Ser Pro Glu Pro Arg Leu Phe Thr Pro  
 100 105 110  
 Glu Glu Phe Phe Arg Ile Phe Asn Arg Ser Ile Asp Ala Phe Lys Asp  
 115 120 125  
 Phe Val Val Ala Ser Glu Thr Ser Asp Cys Val Val Ser Ser Thr Leu  
 130 135 140  
 Ser Pro Glu Lys Asp Ser Arg Val Ser Val Thr Lys Pro Phe Met Leu  
 145 150 155 160  
 Pro Pro Val Ala Ala Ser Ser Leu Arg Asn Asp Ser Ser Ser Ser Asn  
 165 170 175  
 Arg Lys Ala Lys Asn Pro Pro Gly Asp Ser Ser Leu His Trp Ala Ala  
 180 185 190  
 Met Ala Leu Pro Ala Leu Phe Ser Leu Ile Ile Gly Phe Ala Phe Gly

195	200	205
Ala Leu Tyr Trp Lys Lys Arg Gln Pro Ser Leu Thr Arg Ala Val Glu		
210	215	220
Asn Ile Gln Ile Asn Glu Glu Asp Asn Glu Ile Ser Met Leu Gln Glu		
225	230	235
Lys Glu Arg Glu Phe Gln Glu Val		240
245		

<210> 526  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 526

Glu Gly Ile Cys Arg Asn Arg Val Thr Asn Asn Val Lys Asp Val Thr		
1	5	10
Lys Leu Val Ala Asn Leu Pro Lys Asp Tyr Met Ile Thr Leu Lys Tyr		15
20	25	30
Val Pro Gly Met Asp Val Leu Pro Ser His Cys Trp Ile Ser Glu Met		
35	40	45
Val Val Gln Leu Ser Asp Ser Leu Thr Asp Leu Leu Asp Lys Phe Ser		
50	55	60
Asn Ile Ser Glu Gly Leu Ser Asn Tyr Ser Ile Ile Asp Lys Leu Val		80
65	70	75
Asn Ile Val Asp Asp Leu Val Glu Cys Val Lys Glu Asn Ser Ser Lys		
85	90	95
Asp Leu Lys Lys Ser Val Lys Ser Pro Glu Pro Arg Leu Phe Thr Pro		
100	105	110
Glu Glu Phe Phe Arg Ile Phe Asn Arg Ser Ile Asp Ala Phe Lys Asp		
115	120	125
Phe Val Val Ala Ser Glu Thr Ser Asp Cys Val Val Ser Ser Thr Leu		
130	135	140
Ser Pro Glu Lys Asp Ser Arg Val Ser Val Thr Lys Pro Phe Met Leu		
145	150	155
Pro Pro Val Ala Ala Ser Ser Leu Arg Asn Asp Ser Ser Ser Ser Asn		
165	170	175
Arg Lys Ala Lys Asn Pro Pro Gly Asp Ser Ser Leu His Trp Ala Ala		
180	185	190
Met Ala Leu Pro Ala Leu Phe Ser Leu Ile Ile Gly Phe Ala Phe Gly		
195	200	205
Ala Leu Tyr Trp Lys Lys Arg Gln Pro Ser Leu Thr Arg Ala Val Glu		
210	215	220
Asn Ile Gln Ile Asn Glu Glu Asp Asn Glu Ile Ser Met Leu Gln Glu		
225	230	235
Lys Glu Arg Glu Phe Gln Glu Val		240
245		

<210> 527  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 527

Glu Gly Ile Cys Arg Asn Arg Val Thr Asn Asn Val Lys Asp Val Thr		
1	5	10
Lys Leu Val Ala Asn Leu Pro Lys Asp Tyr Met Ile Thr Leu Lys Tyr		15
20	25	30
Val Pro Gly Met Asp Val Leu Pro Ser His Cys Trp Ile Ser Glu Met		
35	40	45
Val Val Gln Leu Ser Asp Ser Leu Thr Asp Leu Leu Asp Lys Phe Ser		
50	55	60

Asn	Ile	Ser	Glu	Gly	Val	Ser	Asn	Tyr	Ser	Ile	Ile	Asp	Lys	Val
65				70						75				80
Asn	Ile	Val	Asp	Asp	Leu	Val	Glu	Cys	Val	Lys	Glu	Asn	Ser	Ser
			85					90					95	Lys
Asp	Leu	Lys	Lys	Ser	Phe	Gln	Ser	Pro	Glu	Pro	Arg	Leu	Phe	Thr
			100					105					110	Pro
Glu	Glu	Phe	Phe	Arg	Ile	Phe	Asn	Arg	Ser	Ile	Asp	Ala	Phe	Lys
		115					120					125		Asp
Phe	Val	Val	Ala	Ser	Glu	Thr	Ser	Asp	Cys	Val	Val	Ser	Ser	Thr
	130					135					140			Leu
Ser	Pro	Glu	Lys	Asp	Ser	Arg	Val	Ser	Val	Thr	Lys	Pro	Phe	Met
145						150				155				160
Pro	Pro	Val	Ala	Ala	Ser	Ser	Leu	Arg	Asn	Asp	Ser	Ser	Ser	Ser
			165						170					175
Arg	Lys	Ala	Lys	Asn	Pro	Pro	Gly	Asp	Ser	Ser	Leu	His	Trp	Ala
			180					185					190	Ala
Met	Ala	Leu	Pro	Ala	Leu	Phe	Ser	Leu	Ile	Ile	Gly	Phe	Ala	Phe
	195						200					205		Gly
Ala	Leu	Tyr	Trp	Lys	Lys	Arg	Gln	Pro	Ser	Leu	Thr	Arg	Ala	Val
	210					215					220			Glu
Asn	Ile	Gln	Ile	Asn	Glu	Asp	Asn	Glu	Ile	Ser	Met	Leu	Gln	Glu
225					230				235					240
Lys	Glu	Arg	Glu	Phe	Gln	Glu	Val							
					245									

<210> 528  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400>	528													
Glu	Gly	Ile	Cys	Arg	Asn	Arg	Val	Thr	Asn	Asn	Val	Lys	Asp	Val
1				5					10					15
Lys	Leu	Val	Ala	Asn	Leu	Pro	Lys	Asp	Tyr	Met	Ile	Thr	Leu	Lys
			20					25					30	Tyr
Val	Pro	Gly	Met	Asp	Val	Leu	Pro	Ser	His	Cys	Trp	Ile	Ser	Glu
	35						40					45		Met
Val	Val	Gln	Leu	Ser	Asp	Ser	Leu	Thr	Asp	Leu	Leu	Asp	Lys	Phe
	50					55					60			Ser
Asn	Ile	Ser	Glu	Gly	Leu	Ser	Asn	Tyr	Ser	Ile	Ile	Asp	Lys	Leu
65				70						75				80
Asn	Ile	Val	Asp	Asp	Leu	Val	Glu	Cys	Val	Lys	Glu	Asn	Ser	Ser
			85					90					95	Lys
Asp	Leu	Lys	Lys	Ser	Phe	Asn	Ser	Pro	Glu	Pro	Arg	Leu	Phe	Thr
			100					105					110	Pro
Glu	Glu	Phe	Phe	Arg	Ile	Phe	Asn	Arg	Ser	Ile	Asp	Ala	Phe	Lys
		115					120					125		Asp
Phe	Val	Val	Ala	Ser	Glu	Thr	Ser	Asp	Cys	Val	Val	Ser	Ser	Thr
	130					135					140			Leu
Ser	Pro	Glu	Lys	Asp	Ser	Arg	Val	Ser	Val	Thr	Lys	Pro	Phe	Met
145						150				155				160
Pro	Pro	Val	Ala	Ala	Ser	Ser	Leu	Arg	Asn	Asp	Ser	Ser	Ser	Ser
			165						170					175
Arg	Lys	Ala	Lys	Asn	Pro	Pro	Gly	Asp	Ser	Ser	Leu	His	Trp	Ala
			180					185					190	Ala
Met	Ala	Leu	Pro	Ala	Leu	Phe	Ser	Leu	Ile	Ile	Gly	Phe	Ala	Phe
	195						200					205		Gly
Ala	Leu	Tyr	Trp	Lys	Lys	Arg	Gln	Pro	Ser	Leu	Thr	Arg	Ala	Val
	210					215					220			Glu
Asn	Ile	Gln	Ile	Asn	Glu	Asp	Asn	Glu	Ile	Ser	Met	Leu	Gln	Glu
225					230				235					240
Lys	Glu	Arg	Glu	Phe	Gln	Glu	Val							

<210> 529  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 529  
 Glu Gly Ile Cys Arg Asn Arg Val Thr Asn Asn Val Lys Asp Val Thr  
 1 5 10 15  
 Lys Leu Val Ala Asn Leu Pro Lys Asp Tyr Met Ile Thr Leu Lys Tyr  
 20 25 30  
 Val Pro Gly Met Asp Val Leu Pro Ser His Cys Trp Ile Ser Glu Met  
 35 40 45  
 Val Val Gln Leu Ser Asp Ser Leu Thr Asp Leu Leu Asp Lys Phe Ser  
 50 55 60  
 Asn Ile Ser Glu Gly Leu Ser Asn Tyr Ser Ile Ile Asp Lys Leu Val  
 65 70 75 80  
 Asn Ile Val Asp Asp Leu Val Glu Cys Val Lys Glu Asn Ser Ser Lys  
 85 90 95  
 Asp Leu Lys Lys Ser Phe Lys Ser Pro Gln Pro Arg Leu Phe Thr Pro  
 100 105 110  
 Glu Glu Phe Phe Arg Ile Phe Asn Arg Ser Ile Asp Ala Phe Lys Asp  
 115 120 125  
 Phe Val Val Ala Ser Glu Thr Ser Asp Cys Val Val Ser Ser Thr Leu  
 130 135 140  
 Ser Pro Glu Lys Asp Ser Arg Val Ser Val Thr Lys Pro Phe Met Leu  
 145 150 155 160  
 Pro Pro Val Ala Ala Ser Ser Leu Arg Asn Asp Ser Ser Ser Ser Asn  
 165 170 175  
 Arg Lys Ala Lys Asn Pro Pro Gly Asp Ser Ser Leu His Trp Ala Ala  
 180 185 190  
 Met Ala Leu Pro Ala Leu Phe Ser Leu Ile Ile Gly Phe Ala Phe Gly  
 195 200 205  
 Ala Leu Tyr Trp Lys Lys Arg Gln Pro Ser Leu Thr Arg Ala Val Glu  
 210 215 220  
 Asn Ile Gln Ile Asn Glu Asp Asn Glu Ile Ser Met Leu Gln Glu  
 225 230 235 240  
 Lys Glu Arg Glu Phe Gln Glu Val  
 245

<210> 530  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 530  
 Glu Gly Ile Cys Arg Asn Arg Val Thr Asn Asn Val Lys Asp Val Thr  
 1 5 10 15  
 Lys Leu Val Ala Asn Leu Pro Lys Asp Tyr Met Ile Thr Leu Lys Tyr  
 20 25 30  
 Val Pro Gly Met Asp Val Leu Pro Ser His Cys Trp Ile Ser Glu Met  
 35 40 45  
 Val Val Gln Leu Ser Asp Ser Leu Thr Asp Leu Leu Asp Lys Phe Ser  
 50 55 60  
 Asn Ile Ser Glu Gly Leu Ser Asn Tyr Ser Ile Ile Asp Lys Leu Val  
 65 70 75 80  
 Asn Ile Val Asp Asp Leu Val Glu Cys Val Lys Glu Asn Ser Ser Lys  
 85 90 95  
 Asp Leu Lys Lys Ser Phe Lys Ser Pro Asn Pro Arg Leu Phe Thr Pro  
 100 105 110

Glu	Glu	Phe	Phe	Arg	Phe	Asn	Arg	Ser	Ile	Asp	Ala	Phe	Asp
		115				120					125		
Phe	Val	Val	Ala	Ser	Glu	Thr	Ser	Asp	Cys	Val	Val	Ser	Thr
	130					135					140		Leu
Ser	Pro	Glu	Lys	Asp	Ser	Arg	Val	Ser	Val	Thr	Lys	Pro	Phe
145					150					155			160
Pro	Pro	Val	Ala	Ala	Ser	Ser	Leu	Arg	Asn	Asp	Ser	Ser	Ser
			165						170				175
Arg	Lys	Ala	Lys	Asn	Pro	Pro	Gly	Asp	Ser	Ser	Leu	His	Trp
		180						185					190
Met	Ala	Leu	Pro	Ala	Leu	Phe	Ser	Leu	Ile	Ile	Gly	Phe	Ala
	195						200				205		Phe
Ala	Leu	Tyr	Trp	Lys	Lys	Arg	Gln	Pro	Ser	Leu	Thr	Arg	Ala
	210					215					220		Val
Asn	Ile	Gln	Ile	Asn	Glu	Glu	Asp	Asn	Glu	Ile	Ser	Met	Leu
225					230					235			Gln
Lys	Glu	Arg	Glu	Phe	Gln	Glu	Val						Glu
					245								

<210> 531  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 531	
Glu Gly Ile Cys Arg Asn Arg Val Thr Asn Asn Val Lys Asp Val Thr	
1 5 10 15	
Lys Leu Val Ala Asn Leu Pro Lys Asp Tyr Met Ile Thr Leu Lys Tyr	
20 25 30	
Val Pro Gly Met Asp Val Leu Pro Ser His Cys Trp Ile Ser Glu Met	
35 40 45	
Val Val Gln Leu Ser Asp Ser Leu Thr Asp Leu Leu Asp Lys Phe Ser	
50 55 60	
Asn Ile Ser Glu Gly Leu Ser Asn Tyr Ser Ile Ile Asp Lys Leu Val	
65 70 75 80	
Asn Ile Val Asp Asp Leu Val Glu Cys Val Lys Glu Asn Ser Ser Lys	
85 90 95	
Asp Leu Lys Lys Ser Phe Lys Ser Pro His Pro Arg Leu Phe Thr Pro	
100 105 110	
Glu Glu Phe Phe Arg Ile Phe Asn Arg Ser Ile Asp Ala Phe Lys Asp	
115 120 125	
Phe Val Val Ala Ser Glu Thr Ser Asp Cys Val Val Ser Ser Thr Leu	
130 135 140	
Ser Pro Glu Lys Asp Ser Arg Val Ser Val Thr Lys Pro Phe Met Leu	
145 150 155 160	
Pro Pro Val Ala Ala Ser Ser Leu Arg Asn Asp Ser Ser Ser Ser Asn	
165 170 175	
Arg Lys Ala Lys Asn Pro Pro Gly Asp Ser Ser Leu His Trp Ala Ala	
180 185 190	
Met Ala Leu Pro Ala Leu Phe Ser Leu Ile Ile Gly Phe Ala Phe Gly	
195 200 205	
Ala Leu Tyr Trp Lys Lys Arg Gln Pro Ser Leu Thr Arg Ala Val Glu	
210 215 220	
Asn Ile Gln Ile Asn Glu Glu Asp Asn Glu Ile Ser Met Leu Gln Glu	
225 230 235 240	
Lys Glu Arg Glu Phe Gln Glu Val	
245	

<210> 532  
 <211> 248  
 <212> PRT

<213> Homo sapiens

<400> 532

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Glu Gly Ile Cys Arg Asn Arg Val Thr Asn Asn Val Lys Asp Val Thr
 1          5          10          15
Lys Leu Val Ala Asn Leu Pro Lys Asp Tyr Met Ile Thr Leu Lys Tyr
          20          25          30
Val Pro Gly Met Asp Val Leu Pro Ser His Cys Trp Ile Ser Glu Met
          35          40          45
Val Val Gln Leu Ser Asp Ser Leu Thr Asp Leu Leu Asp Lys Phe Ser
          50          55          60
Asn Ile Ser Glu Gly Leu Ser Asn Tyr Ser Ile Ile Asp Lys Leu Val
65          70          75          80
Asn Ile Val Asp Asp Leu Val Glu Cys Val Lys Glu Asn Ser Ser Lys
          85          90          95
Asp Leu Lys Lys Ser Phe Lys Ser Pro Glu Ser Arg Leu Phe Thr Pro
          100          105          110
Glu Glu Phe Phe Arg Ile Phe Asn Arg Ser Ile Asp Ala Phe Lys Asp
          115          120          125
Phe Val Val Ala Ser Glu Thr Ser Asp Cys Val Val Ser Ser Thr Leu
          130          135          140
Ser Pro Glu Lys Asp Ser Arg Val Ser Val Thr Lys Pro Phe Met Leu
145          150          155          160
Pro Pro Val Ala Ala Ser Ser Leu Arg Asn Asp Ser Ser Ser Ser Asn
          165          170          175
Arg Lys Ala Lys Asn Pro Pro Gly Asp Ser Ser Leu His Trp Ala Ala
          180          185          190
Met Ala Leu Pro Ala Leu Phe Ser Leu Ile Ile Gly Phe Ala Phe Gly
          195          200          205
Ala Leu Tyr Trp Lys Lys Arg Gln Pro Ser Leu Thr Arg Ala Val Glu
210          215          220
Asn Ile Gln Ile Asn Glu Asp Asn Glu Ile Ser Met Leu Gln Glu
225          230          235          240
Lys Glu Arg Glu Phe Gln Glu Val
          245
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<210> 533

<211> 248

<212> PRT

<213> Homo sapiens

<400> 533

```
Glu Gly Ile Cys Arg Asn Arg Val Thr Asn Asn Val Lys Asp Val Thr
 1          5          10          15
Lys Leu Val Ala Asn Leu Pro Lys Asp Tyr Met Ile Thr Leu Lys Tyr
          20          25          30
Val Pro Gly Met Asp Val Leu Pro Ser His Cys Trp Ile Ser Glu Met
          35          40          45
Val Val Gln Leu Ser Asp Ser Leu Thr Asp Leu Leu Asp Lys Phe Ser
          50          55          60
Asn Ile Ser Glu Gly Leu Ser Asn Tyr Ser Ile Ile Asp Lys Leu Val
65          70          75          80
Asn Ile Val Asp Asp Leu Val Glu Cys Val Lys Glu Asn Ser Ser Lys
          85          90          95
Asp Leu Lys Lys Ser Phe Lys Ser Pro Glu Ala Arg Leu Phe Thr Pro
          100          105          110
Glu Glu Phe Phe Arg Ile Phe Asn Arg Ser Ile Asp Ala Phe Lys Asp
          115          120          125
Phe Val Val Ala Ser Glu Thr Ser Asp Cys Val Val Ser Ser Thr Leu
          130          135          140
Ser Pro Glu Lys Asp Ser Arg Val Ser Val Thr Lys Pro Phe Met Leu
145          150          155          160
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Pro	Pro	Val	Ala	Ala	Ser	Leu	Arg	Asn	Asp	Ser	Ser	Ser	Asn
			165					170					175
Arg	Lys	Ala	Lys	Asn	Pro	Pro	Gly	Asp	Ser	Ser	Leu	His	Trp
			180					185					190
Met	Ala	Leu	Pro	Ala	Leu	Phe	Ser	Leu	Ile	Ile	Gly	Phe	Ala
			195				200					205	
Ala	Leu	Tyr	Trp	Lys	Lys	Arg	Gln	Pro	Ser	Leu	Thr	Arg	Ala
			210			215					220		
Asn	Ile	Gln	Ile	Asn	Glu	Glu	Asp	Asn	Glu	Ile	Ser	Met	Leu
				230						235			
Lys	Glu	Arg	Glu	Phe	Gln	Glu	Val						
				245									

<210> 534  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 534													
Glu	Gly	Ile	Cys	Arg	Asn	Arg	Val	Thr	Asn	Asn	Val	Lys	Asp
1			5						10				15
Lys	Leu	Val	Ala	Asn	Leu	Pro	Lys	Asp	Tyr	Met	Ile	Thr	Leu
			20					25					30
Val	Pro	Gly	Met	Asp	Val	Leu	Pro	Ser	His	Cys	Trp	Ile	Ser
			35				40					45	
Val	Val	Gln	Leu	Ser	Asp	Ser	Leu	Thr	Asp	Leu	Leu	Asp	Lys
			50			55					60		
Asn	Ile	Ser	Glu	Gly	Leu	Ser	Asn	Tyr	Ser	Ile	Ile	Asp	Lys
					70					75			
Asn	Ile	Val	Asp	Asp	Leu	Val	Glu	Cys	Val	Lys	Glu	Asn	Ser
				85					90				95
Asp	Leu	Lys	Lys	Ser	Phe	Lys	Ser	Pro	Glu	Pro	His	Leu	Phe
			100					105					110
Glu	Glu	Phe	Phe	Arg	Ile	Phe	Asn	Arg	Ser	Ile	Asp	Ala	Phe
			115				120					125	
Phe	Val	Val	Ala	Ser	Glu	Thr	Ser	Asp	Cys	Val	Val	Ser	Ser
			130			135					140		
Ser	Pro	Glu	Lys	Asp	Ser	Arg	Val	Ser	Val	Thr	Lys	Pro	Phe
				150						155			
Pro	Pro	Val	Ala	Ala	Ser	Ser	Leu	Arg	Asn	Asp	Ser	Ser	Ser
				165					170				175
Arg	Lys	Ala	Lys	Asn	Pro	Pro	Gly	Asp	Ser	Ser	Leu	His	Trp
			180					185					190
Met	Ala	Leu	Pro	Ala	Leu	Phe	Ser	Leu	Ile	Ile	Gly	Phe	Ala
			195				200					205	
Ala	Leu	Tyr	Trp	Lys	Lys	Arg	Gln	Pro	Ser	Leu	Thr	Arg	Ala
			210			215					220		
Asn	Ile	Gln	Ile	Asn	Glu	Glu	Asp	Asn	Glu	Ile	Ser	Met	Leu
				230						235			
Lys	Glu	Arg	Glu	Phe	Gln	Glu	Val						
				245									

<210> 535  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 535													
Glu	Gly	Ile	Cys	Arg	Asn	Arg	Val	Thr	Asn	Asn	Val	Lys	Asp
1			5						10				15
Lys	Leu	Val	Ala	Asn	Leu	Pro	Lys	Asp	Tyr	Met	Ile	Thr	Leu

Val	Pro	Gly	Met	Asp	Val	Leu	Pro	Ser	His	Cys	Trp	Ile	Ser	Glu	Met
		35					40					45			
Val	Val	Gln	Leu	Ser	Asp	Ser	Leu	Thr	Asp	Leu	Leu	Asp	Lys	Phe	Ser
	50					55					60				
Asn	Ile	Ser	Glu	Gly	Leu	Ser	Asn	Tyr	Ser	Ile	Ile	Asp	Lys	Leu	Val
65					70					75					80
Asn	Ile	Val	Asp	Asp	Leu	Val	Glu	Cys	Val	Lys	Glu	Asn	Ser	Ser	Lys
			85						90					95	
Asp	Leu	Lys	Lys	Ser	Phe	Lys	Ser	Pro	Glu	Pro	Gln	Leu	Phe	Thr	Pro
			100					105					110		
Glu	Glu	Phe	Phe	Arg	Ile	Phe	Asn	Arg	Ser	Ile	Asp	Ala	Phe	Lys	Asp
		115					120					125			
Phe	Val	Val	Ala	Ser	Glu	Thr	Ser	Asp	Cys	Val	Val	Ser	Ser	Thr	Leu
	130					135					140				
Ser	Pro	Glu	Lys	Asp	Ser	Arg	Val	Ser	Val	Thr	Lys	Pro	Phe	Met	Leu
145					150					155					160
Pro	Pro	Val	Ala	Ala	Ser	Ser	Leu	Arg	Asn	Asp	Ser	Ser	Ser	Ser	Asn
			165						170					175	
Arg	Lys	Ala	Lys	Asn	Pro	Pro	Gly	Asp	Ser	Ser	Leu	His	Trp	Ala	Ala
			180					185					190		
Met	Ala	Leu	Pro	Ala	Leu	Phe	Ser	Leu	Ile	Ile	Gly	Phe	Ala	Phe	Gly
	195					200					205				
Ala	Leu	Tyr	Trp	Lys	Lys	Arg	Gln	Pro	Ser	Leu	Thr	Arg	Ala	Val	Glu
	210					215					220				
Asn	Ile	Gln	Ile	Asn	Glu	Glu	Asp	Asn	Glu	Ile	Ser	Met	Leu	Gln	Glu
225					230					235					240
Lys	Glu	Arg	Glu	Phe	Gln	Glu	Val								
				245											

<210> 536  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 536

Glu	Gly	Ile	Cys	Arg	Asn	Arg	Val	Thr	Asn	Asn	Val	Lys	Asp	Val	Thr
1				5					10					15	
Lys	Leu	Val	Ala	Asn	Leu	Pro	Lys	Asp	Tyr	Met	Ile	Thr	Leu	Lys	Tyr
			20					25					30		
Val	Pro	Gly	Met	Asp	Val	Leu	Pro	Ser	His	Cys	Trp	Ile	Ser	Glu	Met
	35						40					45			
Val	Val	Gln	Leu	Ser	Asp	Ser	Leu	Thr	Asp	Leu	Leu	Asp	Lys	Phe	Ser
	50					55					60				
Asn	Ile	Ser	Glu	Gly	Leu	Ser	Asn	Tyr	Ser	Ile	Ile	Asp	Lys	Leu	Val
65					70					75					80
Asn	Ile	Val	Asp	Asp	Leu	Val	Glu	Cys	Val	Lys	Glu	Asn	Ser	Ser	Lys
			85						90					95	
Asp	Leu	Lys	Lys	Ser	Phe	Lys	Ser	Pro	Glu	Pro	Arg	Val	Phe	Thr	Pro
			100					105					110		
Glu	Glu	Phe	Phe	Arg	Ile	Phe	Asn	Arg	Ser	Ile	Asp	Ala	Phe	Lys	Asp
		115					120					125			
Phe	Val	Val	Ala	Ser	Glu	Thr	Ser	Asp	Cys	Val	Val	Ser	Ser	Thr	Leu
	130					135					140				
Ser	Pro	Glu	Lys	Asp	Ser	Arg	Val	Ser	Val	Thr	Lys	Pro	Phe	Met	Leu
145					150					155					160
Pro	Pro	Val	Ala	Ala	Ser	Ser	Leu	Arg	Asn	Asp	Ser	Ser	Ser	Ser	Asn
			165						170					175	
Arg	Lys	Ala	Lys	Asn	Pro	Pro	Gly	Asp	Ser	Ser	Leu	His	Trp	Ala	Ala
			180					185					190		
Met	Ala	Leu	Pro	Ala	Leu	Phe	Ser	Leu	Ile	Ile	Gly	Phe	Ala	Phe	Gly
	195					200					205				

Ala Leu Tyr Trp Lys Arg Gln Pro Ser Leu Thr Arg Ala Glu  
 210 215 220  
 Asn Ile Gln Ile Asn Glu Asp Asn Glu Ile Ser Met Leu Gln Glu  
 225 230 235 240  
 Lys Glu Arg Glu Phe Gln Glu Val  
 245

<210> 537  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 537  
 Glu Gly Ile Cys Arg Asn Arg Val Thr Asn Asn Val Lys Asp Val Thr  
 1 5 10 15  
 Lys Leu Val Ala Asn Leu Pro Lys Asp Tyr Met Ile Thr Leu Lys Tyr  
 20 25 30  
 Val Pro Gly Met Asp Val Leu Pro Ser His Cys Trp Ile Ser Glu Met  
 35 40 45  
 Val Val Gln Leu Ser Asp Ser Leu Thr Asp Leu Leu Asp Lys Phe Ser  
 50 55 60  
 Asn Ile Ser Glu Gly Leu Ser Asn Tyr Ser Ile Ile Asp Lys Leu Val  
 65 70 75 80  
 Asn Ile Val Asp Asp Leu Val Glu Cys Val Lys Glu Asn Ser Ser Lys  
 85 90 95  
 Asp Leu Lys Lys Ser Phe Lys Ser Pro Glu Pro Arg Ile Phe Thr Pro  
 100 105 110  
 Glu Glu Phe Phe Arg Ile Phe Asn Arg Ser Ile Asp Ala Phe Lys Asp  
 115 120 125  
 Phe Val Val Ala Ser Glu Thr Ser Asp Cys Val Val Ser Ser Thr Leu  
 130 135 140  
 Ser Pro Glu Lys Asp Ser Arg Val Ser Val Thr Lys Pro Phe Met Leu  
 145 150 155 160  
 Pro Pro Val Ala Ala Ser Ser Leu Arg Asn Asp Ser Ser Ser Ser Asn  
 165 170 175  
 Arg Lys Ala Lys Asn Pro Pro Gly Asp Ser Ser Leu His Trp Ala Ala  
 180 185 190  
 Met Ala Leu Pro Ala Leu Phe Ser Leu Ile Ile Gly Phe Ala Phe Gly  
 195 200 205  
 Ala Leu Tyr Trp Lys Lys Arg Gln Pro Ser Leu Thr Arg Ala Val Glu  
 210 215 220  
 Asn Ile Gln Ile Asn Glu Glu Asp Asn Glu Ile Ser Met Leu Gln Glu  
 225 230 235 240  
 Lys Glu Arg Glu Phe Gln Glu Val  
 245

<210> 538  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 538  
 Glu Gly Ile Cys Arg Asn Arg Val Thr Asn Asn Val Lys Asp Val Thr  
 1 5 10 15  
 Lys Leu Val Ala Asn Leu Pro Lys Asp Tyr Met Ile Thr Leu Lys Tyr  
 20 25 30  
 Val Pro Gly Met Asp Val Leu Pro Ser His Cys Trp Ile Ser Glu Met  
 35 40 45  
 Val Val Gln Leu Ser Asp Ser Leu Thr Asp Leu Leu Asp Lys Phe Ser  
 50 55 60  
 Asn Ile Ser Glu Gly Leu Ser Asn Tyr Ser Ile Ile Asp Lys Leu Val

65	Asn	Ile	Val	Asp	Asp	Leu	Val	Glu	Cys	Val	Lys	Glu	Asn	Ser	Ser	Lys	80
				85							75						
	Asp	Leu	Lys	Lys	Ser	Phe	Lys	Ser	Pro	Glu	Pro	Arg	Leu	Phe	Thr	Pro	95
			100						105					110			
	Glu	Glu	Phe	Phe	Arg	Ile	Phe	Asn	Arg	Ser	Ile	Asp	Ala	Phe	Lys	Asp	
			115					120					125				
	Phe	Val	Val	Ala	Ser	Gln	Thr	Ser	Asp	Cys	Val	Val	Ser	Ser	Thr	Leu	
		130				135						140					
	Ser	Pro	Glu	Lys	Asp	Ser	Arg	Val	Ser	Val	Thr	Lys	Pro	Phe	Met	Leu	
145					150						155					160	
	Pro	Pro	Val	Ala	Ala	Ser	Ser	Leu	Arg	Asn	Asp	Ser	Ser	Ser	Ser	Asn	
				165						170						175	
	Arg	Lys	Ala	Lys	Asn	Pro	Pro	Gly	Asp	Ser	Ser	Leu	His	Trp	Ala	Ala	
			180					185						190			
	Met	Ala	Leu	Pro	Ala	Leu	Phe	Ser	Leu	Ile	Ile	Gly	Phe	Ala	Phe	Gly	
		195				200						205					
	Ala	Leu	Tyr	Trp	Lys	Lys	Arg	Gln	Pro	Ser	Leu	Thr	Arg	Ala	Val	Glu	
		210				215						220					
	Asn	Ile	Gln	Ile	Asn	Glu	Asp	Asn	Glu	Ile	Ser	Met	Leu	Gln	Glu		
225					230				235						240		
	Lys	Glu	Arg	Glu	Phe	Gln	Glu	Val									
				245													

<210> 539  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 539	Glu	Gly	Ile	Cys	Arg	Asn	Arg	Val	Thr	Asn	Asn	Val	Lys	Asp	Val	Thr
1				5						10					15	
	Lys	Leu	Val	Ala	Asn	Leu	Pro	Lys	Asp	Tyr	Met	Ile	Thr	Leu	Lys	Tyr
			20						25					30		
	Val	Pro	Gly	Met	Asp	Val	Leu	Pro	Ser	His	Cys	Trp	Ile	Ser	Glu	Met
		35				40						45				
	Val	Val	Gln	Leu	Ser	Asp	Ser	Leu	Thr	Asp	Leu	Leu	Asp	Lys	Phe	Ser
		50				55					60					
	Asn	Ile	Ser	Glu	Gly	Leu	Ser	Asn	Tyr	Ser	Ile	Ile	Asp	Lys	Leu	Val
65				70						75					80	
	Asn	Ile	Val	Asp	Asp	Leu	Val	Glu	Cys	Val	Lys	Glu	Asn	Ser	Ser	Lys
			85						90					95		
	Asp	Leu	Lys	Lys	Ser	Phe	Lys	Ser	Pro	Glu	Pro	Arg	Leu	Phe	Thr	Pro
			100						105					110		
	Glu	Glu	Phe	Phe	Arg	Ile	Phe	Asn	Arg	Ser	Ile	Asp	Ala	Phe	Lys	Asp
			115					120					125			
	Phe	Val	Val	Ala	Ser	Asn	Thr	Ser	Asp	Cys	Val	Val	Ser	Ser	Thr	Leu
		130				135						140				
	Ser	Pro	Glu	Lys	Asp	Ser	Arg	Val	Ser	Val	Thr	Lys	Pro	Phe	Met	Leu
145				150							155					160
	Pro	Pro	Val	Ala	Ala	Ser	Ser	Leu	Arg	Asn	Asp	Ser	Ser	Ser	Ser	Asn
				165						170					175	
	Arg	Lys	Ala	Lys	Asn	Pro	Pro	Gly	Asp	Ser	Ser	Leu	His	Trp	Ala	Ala
			180						185					190		
	Met	Ala	Leu	Pro	Ala	Leu	Phe	Ser	Leu	Ile	Ile	Gly	Phe	Ala	Phe	Gly
		195					200					205				
	Ala	Leu	Tyr	Trp	Lys	Lys	Arg	Gln	Pro	Ser	Leu	Thr	Arg	Ala	Val	Glu
		210				215						220				
	Asn	Ile	Gln	Ile	Asn	Glu	Asp	Asn	Glu	Ile	Ser	Met	Leu	Gln	Glu	
225				230					235						240	
	Lys	Glu	Arg	Glu	Phe	Gln	Glu	Val								
				245												

<210> 540  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 540  
 Glu Gly Ile Cys Arg Asn Arg Val Thr Asn Asn Val Lys Asp Val Thr  
 1 5 10 15  
 Lys Leu Val Ala Asn Leu Pro Lys Asp Tyr Met Ile Thr Leu Lys Tyr  
 20 25 30  
 Val Pro Gly Met Asp Val Leu Pro Ser His Cys Trp Ile Ser Glu Met  
 35 40 45  
 Val Val Gln Leu Ser Asp Ser Leu Thr Asp Leu Leu Asp Lys Phe Ser  
 50 55 60  
 Asn Ile Ser Glu Gly Leu Ser Asn Tyr Ser Ile Ile Asp Lys Leu Val  
 65 70 75 80  
 Asn Ile Val Asp Asp Leu Val Glu Cys Val Lys Glu Asn Ser Ser Lys  
 85 90 95  
 Asp Leu Lys Lys Ser Phe Lys Ser Pro Glu Pro Arg Leu Phe Thr Pro  
 100 105 110  
 Glu Glu Phe Phe Arg Ile Phe Asn Arg Ser Ile Asp Ala Phe Lys Asp  
 115 120 125  
 Phe Val Val Ala Ser His Thr Ser Asp Cys Val Val Ser Ser Thr Leu  
 130 135 140  
 Ser Pro Glu Lys Asp Ser Arg Val Ser Val Thr Lys Pro Phe Met Leu  
 145 150 155 160  
 Pro Pro Val Ala Ala Ser Ser Leu Arg Asn Asp Ser Ser Ser Ser Asn  
 165 170 175  
 Arg Lys Ala Lys Asn Pro Pro Gly Asp Ser Ser Leu His Trp Ala Ala  
 180 185 190  
 Met Ala Leu Pro Ala Leu Phe Ser Leu Ile Ile Gly Phe Ala Phe Gly  
 195 200 205  
 Ala Leu Tyr Trp Lys Lys Arg Gln Pro Ser Leu Thr Arg Ala Val Glu  
 210 215 220  
 Asn Ile Gln Ile Asn Glu Glu Asp Asn Glu Ile Ser Met Leu Gln Glu  
 225 230 235 240  
 Lys Glu Arg Glu Phe Gln Glu Val  
 245

<210> 541  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 541  
 Glu Gly Ile Cys Arg Asn Arg Val Thr Asn Asn Val Lys Asp Val Thr  
 1 5 10 15  
 Lys Leu Val Ala Asn Leu Pro Lys Asp Tyr Met Ile Thr Leu Lys Tyr  
 20 25 30  
 Val Pro Gly Met Asp Val Leu Pro Ser His Cys Trp Ile Ser Glu Met  
 35 40 45  
 Val Val Gln Leu Ser Asp Ser Leu Thr Asp Leu Leu Asp Lys Phe Ser  
 50 55 60  
 Asn Ile Ser Glu Gly Leu Ser Asn Tyr Ser Ile Ile Asp Lys Leu Val  
 65 70 75 80  
 Asn Ile Val Asp Asp Leu Val Glu Cys Val Lys Glu Asn Ser Ser Lys  
 85 90 95  
 Asp Leu Lys Lys Ser Phe Lys Ser Pro Glu Pro Arg Leu Phe Thr Pro  
 100 105 110  
 Glu Glu Phe Phe Arg Ile Phe Asn Arg Ser Ile Asp Ala Phe Lys Asp

115	Phe Val Val Ala Ser Glu Thr Ser Gln Cys Val Val Ser Ser Thr Leu	120	125
130	Ser Pro Glu Lys Asp Ser Arg Val Ser Val Thr Lys Pro Phe Met Leu	135	140
145	Pro Pro Val Ala Ala Ser Ser Leu Arg Asn Asp Ser Ser Ser Ser Asn	150	155
165	Arg Lys Ala Lys Asn Pro Pro Gly Asp Ser Ser Leu His Trp Ala Ala	170	175
180	Met Ala Leu Pro Ala Leu Phe Ser Leu Ile Ile Gly Phe Ala Phe Gly	185	190
195	Ala Leu Tyr Trp Lys Lys Arg Gln Pro Ser Leu Thr Arg Ala Val Glu	200	205
210	Asn Ile Gln Ile Asn Glu Glu Asp Asn Glu Ile Ser Met Leu Gln Glu	215	220
225	Lys Glu Arg Glu Phe Gln Glu Val	230	235
245			240

<210> 542  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 542	Glu Gly Ile Cys Arg Asn Arg Val Thr Asn Asn Val Lys Asp Val Thr
1	5 10 15
Lys Leu Val Ala Asn Leu Pro Lys Asp Tyr Met Ile Thr Leu Lys Tyr	
20	25 30
Val Pro Gly Met Asp Val Leu Pro Ser His Cys Trp Ile Ser Glu Met	
35	40 45
Val Val Gln Leu Ser Asp Ser Leu Thr Asp Leu Leu Asp Lys Phe Ser	
50	55 60
Asn Ile Ser Glu Gly Leu Ser Asn Tyr Ser Ile Ile Asp Lys Leu Val	
65	70 75 80
Asn Ile Val Asp Asp Leu Val Glu Cys Val Lys Glu Asn Ser Ser Lys	
85	90 95
Asp Leu Lys Lys Ser Phe Lys Ser Pro Glu Pro Arg Leu Phe Thr Pro	
100	105 110
Glu Glu Phe Phe Arg Ile Phe Asn Arg Ser Ile Asp Ala Phe Lys Asp	
115	120 125
Phe Val Val Ala Ser Glu Thr Ser Asn Cys Val Val Ser Ser Thr Leu	
130	135 140
Ser Pro Glu Lys Asp Ser Arg Val Ser Val Thr Lys Pro Phe Met Leu	
145	150 155 160
Pro Pro Val Ala Ala Ser Ser Leu Arg Asn Asp Ser Ser Ser Ser Asn	
165	170 175
Arg Lys Ala Lys Asn Pro Pro Gly Asp Ser Ser Leu His Trp Ala Ala	
180	185 190
Met Ala Leu Pro Ala Leu Phe Ser Leu Ile Ile Gly Phe Ala Phe Gly	
195	200 205
Ala Leu Tyr Trp Lys Lys Arg Gln Pro Ser Leu Thr Arg Ala Val Glu	
210	215 220
Asn Ile Gln Ile Asn Glu Glu Asp Asn Glu Ile Ser Met Leu Gln Glu	
225	230 235 240
Lys Glu Arg Glu Phe Gln Glu Val	
245	

<210> 543  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 543

His Lys Cys Asp Ile Thr Leu Gln Glu Ile Ile Lys Thr Leu Asn Ser  
1 5 10 15  
Leu Thr Glu Gln Lys Thr Leu Cys Thr Gln Leu Thr Val Thr Asp Ile  
20 25 30  
Phe Ala Ala Ser Lys Asn Thr Thr Glu Lys Glu Thr Phe Cys Arg Ala  
35 40 45  
Ala Thr Val Leu Arg Gln Phe Tyr Ser His His Glu Lys Asp Thr Arg  
50 55 60  
Cys Leu Gly Ala Thr Ala Gln Gln Phe His Arg His Lys Gln Leu Ile  
65 70 75 80  
Arg Phe Leu Lys Arg Leu Asp Arg Asn Leu Trp Gly Leu Ala Gly Leu  
85 90 95  
Asn Ser Cys Pro Val Lys Glu Ala Asn Gln Ser Thr Leu Glu Asn Phe  
100 105 110  
Leu Glu Arg Leu Lys Thr Ile Met Arg Glu Lys Tyr Ser Lys Cys Ser  
115 120 125  
Ser

<210> 544

<211> 129

<212> PRT

<213> Homo sapiens

<400> 544

His Lys Cys Asp Ile Thr Leu Gln Glu Ile Ile Lys Thr Leu Asn Ser  
1 5 10 15  
Leu Thr Glu Gln Lys Thr Leu Cys Thr Asn Leu Thr Val Thr Asp Ile  
20 25 30  
Phe Ala Ala Ser Lys Asn Thr Thr Glu Lys Glu Thr Phe Cys Arg Ala  
35 40 45  
Ala Thr Val Leu Arg Gln Phe Tyr Ser His His Glu Lys Asp Thr Arg  
50 55 60  
Cys Leu Gly Ala Thr Ala Gln Gln Phe His Arg His Lys Gln Leu Ile  
65 70 75 80  
Arg Phe Leu Lys Arg Leu Asp Arg Asn Leu Trp Gly Leu Ala Gly Leu  
85 90 95  
Asn Ser Cys Pro Val Lys Glu Ala Asn Gln Ser Thr Leu Glu Asn Phe  
100 105 110  
Leu Glu Arg Leu Lys Thr Ile Met Arg Glu Lys Tyr Ser Lys Cys Ser  
115 120 125  
Ser

<210> 545

<211> 129

<212> PRT

<213> Homo sapiens

<400> 545

His Lys Cys Asp Ile Thr Leu Gln Glu Ile Ile Lys Thr Leu Asn Ser  
1 5 10 15  
Leu Thr Glu Gln Lys Thr Leu Cys Thr His Leu Thr Val Thr Asp Ile  
20 25 30  
Phe Ala Ala Ser Lys Asn Thr Thr Glu Lys Glu Thr Phe Cys Arg Ala  
35 40 45  
Ala Thr Val Leu Arg Gln Phe Tyr Ser His His Glu Lys Asp Thr Arg  
50 55 60  
Cys Leu Gly Ala Thr Ala Gln Gln Phe His Arg His Lys Gln Leu Ile  
65 70 75 80  
Arg Phe Leu Lys Arg Leu Asp Arg Asn Leu Trp Gly Leu Ala Gly Leu

85                      90  
 Asn Ser Cys Pro Val Lys Glu Ala Asn Gln Ser Thr Leu Glu Asn Phe  
                     100                      105                      110  
 Leu Glu Arg Leu Lys Thr Ile Met Arg Glu Lys Tyr Ser Lys Cys Ser  
                     115                      120                      125  
 Ser

<210> 546  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 546  
 His Lys Cys Asp Ile Thr Leu Gln Glu Ile Ile Lys Thr Leu Asn Ser  
 1                      5                      10                      15  
 Leu Thr Glu Gln Lys Thr Leu Cys Thr Glu Leu Thr Val Thr Asp Ile  
                     20                      25                      30  
 Phe Ala Ala Ser Gln Asn Thr Thr Glu Lys Glu Thr Phe Cys Arg Ala  
                     35                      40                      45  
 Ala Thr Val Leu Arg Gln Phe Tyr Ser His His Glu Lys Asp Thr Arg  
                     50                      55                      60  
 Cys Leu Gly Ala Thr Ala Gln Gln Phe His Arg His Lys Gln Leu Ile  
 65                      70                      75                      80  
 Arg Phe Leu Lys Arg Leu Asp Arg Asn Leu Trp Gly Leu Ala Gly Leu  
                     85                      90                      95  
 Asn Ser Cys Pro Val Lys Glu Ala Asn Gln Ser Thr Leu Glu Asn Phe  
                     100                      105                      110  
 Leu Glu Arg Leu Lys Thr Ile Met Arg Glu Lys Tyr Ser Lys Cys Ser  
                     115                      120                      125  
 Ser

<210> 547  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 547  
 His Lys Cys Asp Ile Thr Leu Gln Glu Ile Ile Lys Thr Leu Asn Ser  
 1                      5                      10                      15  
 Leu Thr Glu Gln Lys Thr Leu Cys Thr Glu Leu Thr Val Thr Asp Ile  
                     20                      25                      30  
 Phe Ala Ala Ser Asn Asn Thr Thr Glu Lys Glu Thr Phe Cys Arg Ala  
                     35                      40                      45  
 Ala Thr Val Leu Arg Gln Phe Tyr Ser His His Glu Lys Asp Thr Arg  
                     50                      55                      60  
 Cys Leu Gly Ala Thr Ala Gln Gln Phe His Arg His Lys Gln Leu Ile  
 65                      70                      75                      80  
 Arg Phe Leu Lys Arg Leu Asp Arg Asn Leu Trp Gly Leu Ala Gly Leu  
                     85                      90                      95  
 Asn Ser Cys Pro Val Lys Glu Ala Asn Gln Ser Thr Leu Glu Asn Phe  
                     100                      105                      110  
 Leu Glu Arg Leu Lys Thr Ile Met Arg Glu Lys Tyr Ser Lys Cys Ser  
                     115                      120                      125  
 Ser

<210> 548  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens



<400> 548

His	Lys	Cys	Asp	Ile	Thr	Leu	Gln	Glu	Ile	Ile	Lys	Thr	Leu	Asn	Ser
1				5					10					15	
Leu	Thr	Glu	Gln	Lys	Thr	Leu	Cys	Thr	Glu	Leu	Thr	Val	Thr	Asp	Ile
			20					25					30		
Phe	Ala	Ala	Ser	Lys	Asn	Thr	Thr	Glu	Lys	Glu	Thr	Phe	Cys	Arg	Ala
		35					40					45			
Ala	Thr	Val	Leu	His	Gln	Phe	Tyr	Ser	His	His	Glu	Lys	Asp	Thr	Arg
	50				55						60				
Cys	Leu	Gly	Ala	Thr	Ala	Gln	Gln	Phe	His	Arg	His	Lys	Gln	Leu	Ile
65					70					75				80	
Arg	Phe	Leu	Lys	Arg	Leu	Asp	Arg	Asn	Leu	Trp	Gly	Leu	Ala	Gly	Leu
				85				90					95		
Asn	Ser	Cys	Pro	Val	Lys	Glu	Ala	Asn	Gln	Ser	Thr	Leu	Glu	Asn	Phe
			100					105					110		
Leu	Glu	Arg	Leu	Lys	Thr	Ile	Met	Arg	Glu	Lys	Tyr	Ser	Lys	Cys	Ser
		115					120						125		

Ser

<210> 549

<211> 129

<212> PRT

<213> Homo sapiens

<400> 549

His	Lys	Cys	Asp	Ile	Thr	Leu	Gln	Glu	Ile	Ile	Lys	Thr	Leu	Asn	Ser
1				5					10					15	
Leu	Thr	Glu	Gln	Lys	Thr	Leu	Cys	Thr	Glu	Leu	Thr	Val	Thr	Asp	Ile
			20					25					30		
Phe	Ala	Ala	Ser	Lys	Asn	Thr	Thr	Glu	Lys	Glu	Thr	Phe	Cys	Arg	Ala
		35					40					45			
Ala	Thr	Val	Leu	Gln	Gln	Phe	Tyr	Ser	His	His	Glu	Lys	Asp	Thr	Arg
	50				55						60				
Cys	Leu	Gly	Ala	Thr	Ala	Gln	Gln	Phe	His	Arg	His	Lys	Gln	Leu	Ile
65					70					75				80	
Arg	Phe	Leu	Lys	Arg	Leu	Asp	Arg	Asn	Leu	Trp	Gly	Leu	Ala	Gly	Leu
				85				90					95		
Asn	Ser	Cys	Pro	Val	Lys	Glu	Ala	Asn	Gln	Ser	Thr	Leu	Glu	Asn	Phe
			100					105					110		
Leu	Glu	Arg	Leu	Lys	Thr	Ile	Met	Arg	Glu	Lys	Tyr	Ser	Lys	Cys	Ser
		115					120						125		

Ser

<210> 550

<211> 129

<212> PRT

<213> Homo sapiens

<400> 550

His	Lys	Cys	Asp	Ile	Thr	Leu	Gln	Glu	Ile	Ile	Lys	Thr	Leu	Asn	Ser
1				5					10					15	
Leu	Thr	Glu	Gln	Lys	Thr	Leu	Cys	Thr	Glu	Leu	Thr	Val	Thr	Asp	Ile
			20					25					30		
Phe	Ala	Ala	Ser	Lys	Asn	Thr	Thr	Glu	Lys	Glu	Thr	Phe	Cys	Arg	Ala
		35					40					45			
Ala	Thr	Val	Leu	Arg	Gln	Phe	Tyr	Ser	His	His	Gln	Lys	Asp	Thr	Arg
	50				55						60				
Cys	Leu	Gly	Ala	Thr	Ala	Gln	Gln	Phe	His	Arg	His	Lys	Gln	Leu	Ile
65					70					75				80	
Arg	Phe	Leu	Lys	Arg	Leu	Asp	Arg	Asn	Leu	Trp	Gly	Leu	Ala	Gly	Leu
				85				90					95		

Asn Ser Cys Pro Val Lys Glu Ala Asn Gln Ser Thr Leu Glu Asn Phe  
 100 105 110  
 Leu Glu Arg Leu Lys Thr Ile Met Arg Glu Lys Tyr Ser Lys Cys Ser  
 115 120 125  
 Ser

<210> 551  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 551  
 His Lys Cys Asp Ile Thr Leu Gln Glu Ile Ile Lys Thr Leu Asn Ser  
 1 5 10 15  
 Leu Thr Glu Gln Lys Thr Leu Cys Thr Glu Leu Thr Val Thr Asp Ile  
 20 25 30  
 Phe Ala Ala Ser Lys Asn Thr Thr Glu Lys Glu Thr Phe Cys Arg Ala  
 35 40 45  
 Ala Thr Val Leu Arg Gln Phe Tyr Ser His His Asn Lys Asp Thr Arg  
 50 55 60  
 Cys Leu Gly Ala Thr Ala Gln Gln Phe His Arg His Lys Gln Leu Ile  
 65 70 75 80  
 Arg Phe Leu Lys Arg Leu Asp Arg Asn Leu Trp Gly Leu Ala Gly Leu  
 85 90 95  
 Asn Ser Cys Pro Val Lys Glu Ala Asn Gln Ser Thr Leu Glu Asn Phe  
 100 105 110  
 Leu Glu Arg Leu Lys Thr Ile Met Arg Glu Lys Tyr Ser Lys Cys Ser  
 115 120 125  
 Ser

<210> 552  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 552  
 His Lys Cys Asp Ile Thr Leu Gln Glu Ile Ile Lys Thr Leu Asn Ser  
 1 5 10 15  
 Leu Thr Glu Gln Lys Thr Leu Cys Thr Glu Leu Thr Val Thr Asp Ile  
 20 25 30  
 Phe Ala Ala Ser Lys Asn Thr Thr Glu Lys Glu Thr Phe Cys Arg Ala  
 35 40 45  
 Ala Thr Val Leu Arg Gln Phe Tyr Ser His His His Lys Asp Thr Arg  
 50 55 60  
 Cys Leu Gly Ala Thr Ala Gln Gln Phe His Arg His Lys Gln Leu Ile  
 65 70 75 80  
 Arg Phe Leu Lys Arg Leu Asp Arg Asn Leu Trp Gly Leu Ala Gly Leu  
 85 90 95  
 Asn Ser Cys Pro Val Lys Glu Ala Asn Gln Ser Thr Leu Glu Asn Phe  
 100 105 110  
 Leu Glu Arg Leu Lys Thr Ile Met Arg Glu Lys Tyr Ser Lys Cys Ser  
 115 120 125  
 Ser

<210> 553  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 553

His Lys Cys Asp Ile Thr Leu Gln Glu Ile Ile Lys Thr Leu Asn Ser  
 1 5 10 15  
 Leu Thr Glu Gln Lys Thr Leu Cys Thr Glu Leu Thr Val Thr Asp Ile  
 20 25 30  
 Phe Ala Ala Ser Lys Asn Thr Thr Glu Lys Glu Thr Phe Cys Arg Ala  
 35 40 45  
 Ala Thr Val Leu Arg Gln Phe Tyr Ser His His Glu Gln Asp Thr Arg  
 50 55 60  
 Cys Leu Gly Ala Thr Ala Gln Gln Phe His Arg His Lys Gln Leu Ile  
 65 70 75 80  
 Arg Phe Leu Lys Arg Leu Asp Arg Asn Leu Trp Gly Leu Ala Gly Leu  
 85 90 95  
 Asn Ser Cys Pro Val Lys Glu Ala Asn Gln Ser Thr Leu Glu Asn Phe  
 100 105 110  
 Leu Glu Arg Leu Lys Thr Ile Met Arg Glu Lys Tyr Ser Lys Cys Ser  
 115 120 125  
 Ser

<210> 554  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 554  
 His Lys Cys Asp Ile Thr Leu Gln Glu Ile Ile Lys Thr Leu Asn Ser  
 1 5 10 15  
 Leu Thr Glu Gln Lys Thr Leu Cys Thr Glu Leu Thr Val Thr Asp Ile  
 20 25 30  
 Phe Ala Ala Ser Lys Asn Thr Thr Glu Lys Glu Thr Phe Cys Arg Ala  
 35 40 45  
 Ala Thr Val Leu Arg Gln Phe Tyr Ser His His Glu Asn Asp Thr Arg  
 50 55 60  
 Cys Leu Gly Ala Thr Ala Gln Gln Phe His Arg His Lys Gln Leu Ile  
 65 70 75 80  
 Arg Phe Leu Lys Arg Leu Asp Arg Asn Leu Trp Gly Leu Ala Gly Leu  
 85 90 95  
 Asn Ser Cys Pro Val Lys Glu Ala Asn Gln Ser Thr Leu Glu Asn Phe  
 100 105 110  
 Leu Glu Arg Leu Lys Thr Ile Met Arg Glu Lys Tyr Ser Lys Cys Ser  
 115 120 125  
 Ser

<210> 555  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 555  
 His Lys Cys Asp Ile Thr Leu Gln Glu Ile Ile Lys Thr Leu Asn Ser  
 1 5 10 15  
 Leu Thr Glu Gln Lys Thr Leu Cys Thr Glu Leu Thr Val Thr Asp Ile  
 20 25 30  
 Phe Ala Ala Ser Lys Asn Thr Thr Glu Lys Glu Thr Phe Cys Arg Ala  
 35 40 45  
 Ala Thr Val Leu Arg Gln Phe Tyr Ser His His Glu Lys Asp Thr His  
 50 55 60  
 Cys Leu Gly Ala Thr Ala Gln Gln Phe His Arg His Lys Gln Leu Ile  
 65 70 75 80  
 Arg Phe Leu Lys Arg Leu Asp Arg Asn Leu Trp Gly Leu Ala Gly Leu  
 85 90 95  
 Asn Ser Cys Pro Val Lys Glu Ala Asn Gln Ser Thr Leu Glu Asn Phe

100                      105                      110  
 Leu Glu Arg Leu Lys Thr Ile Met Arg Glu Lys Tyr Ser Lys Cys Ser  
           115                      120                      125  
 Ser

<210> 556  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 556  
 His Lys Cys Asp Ile Thr Leu Gln Glu Ile Ile Lys Thr Leu Asn Ser  
   1                  5                  10                  15  
 Leu Thr Glu Gln Lys Thr Leu Cys Thr Glu Leu Thr Val Thr Asp Ile  
           20                  25                  30  
 Phe Ala Ala Ser Lys Asn Thr Thr Glu Lys Glu Thr Phe Cys Arg Ala  
           35                  40                  45  
 Ala Thr Val Leu Arg Gln Phe Tyr Ser His His Glu Lys Asp Thr Gln  
           50                  55                  60  
 Cys Leu Gly Ala Thr Ala Gln Gln Phe His Arg His Lys Gln Leu Ile  
 65                  70                  75                  80  
 Arg Phe Leu Lys Arg Leu Asp Arg Asn Leu Trp Gly Leu Ala Gly Leu  
           85                  90                  95  
 Asn Ser Cys Pro Val Lys Glu Ala Asn Gln Ser Thr Leu Glu Asn Phe  
           100                  105                  110  
 Leu Glu Arg Leu Lys Thr Ile Met Arg Glu Lys Tyr Ser Lys Cys Ser  
           115                  120                  125  
 Ser

<210> 557  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 557  
 His Lys Cys Asp Ile Thr Leu Gln Glu Ile Ile Lys Thr Leu Asn Ser  
   1                  5                  10                  15  
 Leu Thr Glu Gln Lys Thr Leu Cys Thr Glu Leu Thr Val Thr Asp Ile  
           20                  25                  30  
 Phe Ala Ala Ser Lys Asn Thr Thr Glu Lys Glu Thr Phe Cys Arg Ala  
           35                  40                  45  
 Ala Thr Val Leu Arg Gln Phe Tyr Ser His His Glu Lys Asp Thr Arg  
           50                  55                  60  
 Cys Val Gly Ala Thr Ala Gln Gln Phe His Arg His Lys Gln Leu Ile  
 65                  70                  75                  80  
 Arg Phe Leu Lys Arg Leu Asp Arg Asn Leu Trp Gly Leu Ala Gly Leu  
           85                  90                  95  
 Asn Ser Cys Pro Val Lys Glu Ala Asn Gln Ser Thr Leu Glu Asn Phe  
           100                  105                  110  
 Leu Glu Arg Leu Lys Thr Ile Met Arg Glu Lys Tyr Ser Lys Cys Ser  
           115                  120                  125  
 Ser

<210> 558  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 558  
 His Lys Cys Asp Ile Thr Leu Gln Glu Ile Ile Lys Thr Leu Asn Ser

1	5	10															
Leu	Thr	Glu	Gln	Lys	Thr	Leu	Cys	Thr	Glu	Leu	Thr	Val	Thr	Asp	Ile		
		20						25					30				
Phe	Ala	Ala	Ser	Lys	Asn	Thr	Thr	Glu	Lys	Glu	Thr	Phe	Cys	Arg	Ala		
	35					40						45					
Ala	Thr	Val	Leu	Arg	Gln	Phe	Tyr	Ser	His	His	Glu	Lys	Asp	Thr	Arg		
	50				55						60						
Cys	Ile	Gly	Ala	Thr	Ala	Gln	Gln	Phe	His	Arg	His	Lys	Gln	Leu	Ile		
65					70					75				80			
Arg	Phe	Leu	Lys	Arg	Leu	Asp	Arg	Asn	Leu	Trp	Gly	Leu	Ala	Gly	Leu		
			85					90					95				
Asn	Ser	Cys	Pro	Val	Lys	Glu	Ala	Asn	Gln	Ser	Thr	Leu	Glu	Asn	Phe		
		100						105					110				
Leu	Glu	Arg	Leu	Lys	Thr	Ile	Met	Arg	Glu	Lys	Tyr	Ser	Lys	Cys	Ser		
	115					120							125				

Ser

<210> 559  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 559																	
His	Lys	Cys	Asp	Ile	Thr	Leu	Gln	Glu	Ile	Ile	Lys	Thr	Leu	Asn	Ser		
1				5					10					15			
Leu	Thr	Glu	Gln	Lys	Thr	Leu	Cys	Thr	Glu	Leu	Thr	Val	Thr	Asp	Ile		
		20						25					30				
Phe	Ala	Ala	Ser	Lys	Asn	Thr	Thr	Glu	Lys	Glu	Thr	Phe	Cys	Arg	Ala		
	35					40						45					
Ala	Thr	Val	Leu	Arg	Gln	Phe	Tyr	Ser	His	His	Glu	Lys	Asp	Thr	Arg		
	50				55						60						
Cys	Leu	Gly	Ala	Thr	Ala	Gln	Gln	Phe	His	Arg	His	Lys	Gln	Leu	Ile		
65					70					75				80			
Arg	Phe	Leu	Lys	Arg	Leu	Asp	Arg	Asn	Leu	Trp	Gly	Leu	Ala	Gly	Leu		
			85					90					95				
Asn	Ser	Cys	Ser	Val	Lys	Glu	Ala	Asn	Gln	Ser	Thr	Leu	Glu	Asn	Phe		
		100						105					110				
Leu	Glu	Arg	Leu	Lys	Thr	Ile	Met	Arg	Glu	Lys	Tyr	Ser	Lys	Cys	Ser		
	115					120							125				

Ser

<210> 560  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 560																	
His	Lys	Cys	Asp	Ile	Thr	Leu	Gln	Glu	Ile	Ile	Lys	Thr	Leu	Asn	Ser		
1				5					10					15			
Leu	Thr	Glu	Gln	Lys	Thr	Leu	Cys	Thr	Glu	Leu	Thr	Val	Thr	Asp	Ile		
		20						25					30				
Phe	Ala	Ala	Ser	Lys	Asn	Thr	Thr	Glu	Lys	Glu	Thr	Phe	Cys	Arg	Ala		
	35					40						45					
Ala	Thr	Val	Leu	Arg	Gln	Phe	Tyr	Ser	His	His	Glu	Lys	Asp	Thr	Arg		
	50				55						60						
Cys	Leu	Gly	Ala	Thr	Ala	Gln	Gln	Phe	His	Arg	His	Lys	Gln	Leu	Ile		
65					70					75				80			
Arg	Phe	Leu	Lys	Arg	Leu	Asp	Arg	Asn	Leu	Trp	Gly	Leu	Ala	Gly	Leu		
			85					90					95				
Asn	Ser	Cys	Ala	Val	Lys	Glu	Ala	Asn	Gln	Ser	Thr	Leu	Glu	Asn	Phe		
	100							105					110				

Leu Glu Arg Leu Lys Ile Met Arg Glu Lys Tyr Ser Lys Ser  
 115 120 125  
 Ser

<210> 561  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 561  
 His Lys Cys Asp Ile Thr Leu Gln Glu Ile Ile Lys Thr Leu Asn Ser  
 1 5 10 15  
 Leu Thr Glu Gln Lys Thr Leu Cys Thr Glu Leu Thr Val Thr Asp Ile  
 20 25 30  
 Phe Ala Ala Ser Lys Asn Thr Thr Glu Lys Glu Thr Phe Cys Arg Ala  
 35 40 45  
 Ala Thr Val Leu Arg Gln Phe Tyr Ser His His Glu Lys Asp Thr Arg  
 50 55 60  
 Cys Leu Gly Ala Thr Ala Gln Gln Phe His Arg His Lys Gln Leu Ile  
 65 70 75 80  
 Arg Phe Leu Lys Arg Leu Asp Arg Asn Leu Trp Gly Leu Ala Gly Leu  
 85 90 95  
 Asn Ser Cys Pro Val Gln Glu Ala Asn Gln Ser Thr Leu Glu Asn Phe  
 100 105 110  
 Leu Glu Arg Leu Lys Thr Ile Met Arg Glu Lys Tyr Ser Lys Cys Ser  
 115 120 125  
 Ser

<210> 562  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 562  
 His Lys Cys Asp Ile Thr Leu Gln Glu Ile Ile Lys Thr Leu Asn Ser  
 1 5 10 15  
 Leu Thr Glu Gln Lys Thr Leu Cys Thr Glu Leu Thr Val Thr Asp Ile  
 20 25 30  
 Phe Ala Ala Ser Lys Asn Thr Thr Glu Lys Glu Thr Phe Cys Arg Ala  
 35 40 45  
 Ala Thr Val Leu Arg Gln Phe Tyr Ser His His Glu Lys Asp Thr Arg  
 50 55 60  
 Cys Leu Gly Ala Thr Ala Gln Gln Phe His Arg His Lys Gln Leu Ile  
 65 70 75 80  
 Arg Phe Leu Lys Arg Leu Asp Arg Asn Leu Trp Gly Leu Ala Gly Leu  
 85 90 95  
 Asn Ser Cys Pro Val Asn Glu Ala Asn Gln Ser Thr Leu Glu Asn Phe  
 100 105 110  
 Leu Glu Arg Leu Lys Thr Ile Met Arg Glu Lys Tyr Ser Lys Cys Ser  
 115 120 125  
 Ser

<210> 563  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 563  
 His Lys Cys Asp Ile Thr Leu Gln Glu Ile Ile Lys Thr Leu Asn Ser  
 1 5 10 15

Leu Thr Glu Gln Lys 20 Leu Cys Thr Glu Leu Thr Val Thr 30 Ile  
 Phe Ala Ala Ser Lys Asn Thr Thr Glu Lys Glu Thr Phe Cys Arg Ala  
 35 40 45  
 Ala Thr Val Leu Arg Gln Phe Tyr Ser His His Glu Lys Asp Thr Arg  
 50 55 60  
 Cys Leu Gly Ala Thr Ala Gln Gln Phe His Arg His Lys Gln Leu Ile  
 65 70 75 80  
 Arg Phe Leu Lys Arg Leu Asp Arg Asn Leu Trp Gly Leu Ala Gly Leu  
 85 90 95  
 Asn Ser Cys Pro Val Lys Gln Ala Asn Gln Ser Thr Leu Glu Asn Phe  
 100 105 110  
 Leu Glu Arg Leu Lys Thr Ile Met Arg Glu Lys Tyr Ser Lys Cys Ser  
 115 120 125  
 Ser

<210> 564  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 564  
 His Lys Cys Asp Ile Thr Leu Gln Glu Ile Ile Lys Thr Leu Asn Ser  
 1 5 10 15  
 Leu Thr Glu Gln Lys Thr Leu Cys Thr Glu Leu Thr Val Thr Asp Ile  
 20 25 30  
 Phe Ala Ala Ser Lys Asn Thr Thr Glu Lys Glu Thr Phe Cys Arg Ala  
 35 40 45  
 Ala Thr Val Leu Arg Gln Phe Tyr Ser His His Glu Lys Asp Thr Arg  
 50 55 60  
 Cys Leu Gly Ala Thr Ala Gln Gln Phe His Arg His Lys Gln Leu Ile  
 65 70 75 80  
 Arg Phe Leu Lys Arg Leu Asp Arg Asn Leu Trp Gly Leu Ala Gly Leu  
 85 90 95  
 Asn Ser Cys Pro Val Lys Asn Ala Asn Gln Ser Thr Leu Glu Asn Phe  
 100 105 110  
 Leu Glu Arg Leu Lys Thr Ile Met Arg Glu Lys Tyr Ser Lys Cys Ser  
 115 120 125  
 Ser

<210> 565  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 565  
 His Lys Cys Asp Ile Thr Leu Gln Glu Ile Ile Lys Thr Leu Asn Ser  
 1 5 10 15  
 Leu Thr Glu Gln Lys Thr Leu Cys Thr Glu Leu Thr Val Thr Asp Ile  
 20 25 30  
 Phe Ala Ala Ser Lys Asn Thr Thr Glu Lys Glu Thr Phe Cys Arg Ala  
 35 40 45  
 Ala Thr Val Leu Arg Gln Phe Tyr Ser His His Glu Lys Asp Thr Arg  
 50 55 60  
 Cys Leu Gly Ala Thr Ala Gln Gln Phe His Arg His Lys Gln Leu Ile  
 65 70 75 80  
 Arg Phe Leu Lys Arg Leu Asp Arg Asn Leu Trp Gly Leu Ala Gly Leu  
 85 90 95  
 Asn Ser Cys Pro Val Lys His Ala Asn Gln Ser Thr Leu Glu Asn Phe  
 100 105 110  
 Leu Glu Arg Leu Lys Thr Ile Met Arg Glu Lys Tyr Ser Lys Cys Ser

Ser

<210> 566  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 566

His	Lys	Cys	Asp	Ile	Thr	Leu	Gln	Glu	Ile	Ile	Lys	Thr	Leu	Asn	Ser
1				5					10					15	
Leu	Thr	Glu	Gln	Lys	Thr	Leu	Cys	Thr	Glu	Leu	Thr	Val	Thr	Asp	Ile
			20					25					30		
Phe	Ala	Ala	Ser	Lys	Asn	Thr	Thr	Glu	Lys	Glu	Thr	Phe	Cys	Arg	Ala
		35					40					45			
Ala	Thr	Val	Leu	Arg	Gln	Phe	Tyr	Ser	His	His	Glu	Lys	Asp	Thr	Arg
	50					55					60				
Cys	Leu	Gly	Ala	Thr	Ala	Gln	Gln	Phe	His	Arg	His	Lys	Gln	Leu	Ile
65					70					75				80	
Arg	Phe	Leu	Lys	Arg	Leu	Asp	Arg	Asn	Leu	Trp	Gly	Leu	Ala	Gly	Leu
			85					90						95	
Asn	Ser	Cys	Pro	Val	Lys	Glu	Ala	Asn	Gln	Ser	Thr	Leu	Glu	Asn	Phe
			100					105					110		
Leu	Glu	Arg	Leu	Lys	Thr	Ile	Met	Arg	Glu	Lys	Tyr	Ser	Gln	Cys	Ser
		115					120						125		

Ser

<210> 567  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 567

His	Lys	Cys	Asp	Ile	Thr	Leu	Gln	Glu	Ile	Ile	Lys	Thr	Leu	Asn	Ser
1				5					10					15	
Leu	Thr	Glu	Gln	Lys	Thr	Leu	Cys	Thr	Glu	Leu	Thr	Val	Thr	Asp	Ile
			20					25					30		
Phe	Ala	Ala	Ser	Lys	Asn	Thr	Thr	Glu	Lys	Glu	Thr	Phe	Cys	Arg	Ala
		35					40					45			
Ala	Thr	Val	Leu	Arg	Gln	Phe	Tyr	Ser	His	His	Glu	Lys	Asp	Thr	Arg
	50					55					60				
Cys	Leu	Gly	Ala	Thr	Ala	Gln	Gln	Phe	His	Arg	His	Lys	Gln	Leu	Ile
65					70					75				80	
Arg	Phe	Leu	Lys	Arg	Leu	Asp	Arg	Asn	Leu	Trp	Gly	Leu	Ala	Gly	Leu
			85					90						95	
Asn	Ser	Cys	Pro	Val	Lys	Glu	Ala	Asn	Gln	Ser	Thr	Leu	Glu	Asn	Phe
			100					105					110		
Leu	Glu	Arg	Leu	Lys	Thr	Ile	Met	Arg	Glu	Lys	Tyr	Ser	Asn	Cys	Ser
		115					120						125		

Ser

<210> 568  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 568

Ile	Pro	Thr	Glu	Ile	Pro	Thr	Ser	Ala	Leu	Val	Lys	Glu	Thr	Leu	Ala
1				5					10					15	
Leu	Leu	Ser	Thr	His	Arg	Thr	Leu	Leu	Ile	Ala	Asn	Glu	Thr	Leu	His



Ile	Pro	Val	20	Pro	Val	His	Lys	Asn	25	His	Gln	Leu	Cys	Thr	30	Glu	Glu	Ile
		35						40						45				
Phe	Gln	Gly	Ile	Gly	Thr	Leu	Glu	Ser	Gln	Thr	Val	Gln	Gly	Gly	Thr			
		50				55					60							
Val	Glu	Arg	Leu	Phe	Lys	Asn	Leu	Ser	Leu	Ile	Lys	Lys	Tyr	Ile	Asp			
65					70					75					80			
Gly	Gln	Lys	Lys	Lys	Cys	Gly	Glu	Glu	Arg	Arg	Arg	Val	Asn	Gln	Phe			
			85						90					95				
Leu	Asp	Tyr	Leu	Gln	Glu	Phe	Leu	Gly	Val	Met	Asn	Thr	Glu	Trp	Ile			
			100					105					110					
Ile	Glu	Ser																
			115															

<210> 569  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

Ile	Pro	Thr	Glu	Ile	Pro	Thr	Ser	Ala	Leu	Val	Lys	Glu	Thr	Leu	Ala
1				5					10					15	
Leu	Leu	Ser	Thr	His	Arg	Thr	Leu	Leu	Ile	Ala	Asn	Glu	Thr	Leu	Gln
			20				25					30			
Ile	Pro	Val	Pro	Val	His	Lys	Asn	His	Gln	Leu	Cys	Thr	Glu	Glu	Ile
		35				40					45				
Phe	Gln	Gly	Ile	Gly	Thr	Leu	Glu	Ser	Gln	Thr	Val	Gln	Gly	Gly	Thr
		50				55					60				
Val	Glu	Arg	Leu	Phe	Lys	Asn	Leu	Ser	Leu	Ile	Lys	Lys	Tyr	Ile	Asp
65					70					75					80
Gly	Gln	Lys	Lys	Lys	Cys	Gly	Glu	Glu	Arg	Arg	Arg	Val	Asn	Gln	Phe
			85						90					95	
Leu	Asp	Tyr	Leu	Gln	Glu	Phe	Leu	Gly	Val	Met	Asn	Thr	Glu	Trp	Ile
			100					105					110		
Ile	Glu	Ser													
			115												

<210> 570  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

Ile	Pro	Thr	Glu	Ile	Pro	Thr	Ser	Ala	Leu	Val	Lys	Glu	Thr	Leu	Ala
1				5					10					15	
Leu	Leu	Ser	Thr	His	Arg	Thr	Leu	Leu	Ile	Ala	Asn	Glu	Thr	Leu	Arg
			20				25					30			
Ile	Ser	Val	Pro	Val	His	Lys	Asn	His	Gln	Leu	Cys	Thr	Glu	Glu	Ile
		35				40					45				
Phe	Gln	Gly	Ile	Gly	Thr	Leu	Glu	Ser	Gln	Thr	Val	Gln	Gly	Gly	Thr
		50				55					60				
Val	Glu	Arg	Leu	Phe	Lys	Asn	Leu	Ser	Leu	Ile	Lys	Lys	Tyr	Ile	Asp
65					70					75					80
Gly	Gln	Lys	Lys	Lys	Cys	Gly	Glu	Glu	Arg	Arg	Arg	Val	Asn	Gln	Phe
			85						90					95	
Leu	Asp	Tyr	Leu	Gln	Glu	Phe	Leu	Gly	Val	Met	Asn	Thr	Glu	Trp	Ile
			100					105					110		
Ile	Glu	Ser													
			115												

<210> 571  
 <211> 115  
 <212> PRT

<213> Homo sapiens

<400> 571

Ile	Pro	Thr	Glu	Ile	Pro	Thr	Ser	Ala	Leu	Val	Lys	Glu	Thr	Leu	Ala
1				5					10					15	
Leu	Leu	Ser	Thr	His	Arg	Thr	Leu	Leu	Ile	Ala	Asn	Glu	Thr	Leu	Arg
			20					25					30		
Ile	Ala	Val	Pro	Val	His	Lys	Asn	His	Gln	Leu	Cys	Thr	Glu	Glu	Ile
		35					40					45			
Phe	Gln	Gly	Ile	Gly	Thr	Leu	Glu	Ser	Gln	Thr	Val	Gln	Gly	Gly	Thr
	50					55					60				
Val	Glu	Arg	Leu	Phe	Lys	Asn	Leu	Ser	Leu	Ile	Lys	Lys	Tyr	Ile	Asp
65					70					75					80
Gly	Gln	Lys	Lys	Lys	Cys	Gly	Glu	Glu	Arg	Arg	Arg	Val	Asn	Gln	Phe
				85					90					95	
Leu	Asp	Tyr	Leu	Gln	Glu	Phe	Leu	Gly	Val	Met	Asn	Thr	Glu	Trp	Ile
			100					105						110	
Ile	Glu	Ser													
															115

<210> 572

<211> 115

<212> PRT

<213> Homo sapiens

<400> 572

Ile	Pro	Thr	Glu	Ile	Pro	Thr	Ser	Ala	Leu	Val	Lys	Glu	Thr	Leu	Ala
1				5					10					15	
Leu	Leu	Ser	Thr	His	Arg	Thr	Leu	Leu	Ile	Ala	Asn	Glu	Thr	Leu	Arg
			20					25					30		
Ile	Pro	Val	Pro	Val	His	Gln	Asn	His	Gln	Leu	Cys	Thr	Glu	Glu	Ile
		35					40					45			
Phe	Gln	Gly	Ile	Gly	Thr	Leu	Glu	Ser	Gln	Thr	Val	Gln	Gly	Gly	Thr
	50					55					60				
Val	Glu	Arg	Leu	Phe	Lys	Asn	Leu	Ser	Leu	Ile	Lys	Lys	Tyr	Ile	Asp
65					70					75					80
Gly	Gln	Lys	Lys	Lys	Cys	Gly	Glu	Glu	Arg	Arg	Arg	Val	Asn	Gln	Phe
				85					90					95	
Leu	Asp	Tyr	Leu	Gln	Glu	Phe	Leu	Gly	Val	Met	Asn	Thr	Glu	Trp	Ile
			100					105						110	
Ile	Glu	Ser													
															115

<210> 573

<211> 115

<212> PRT

<213> Homo sapiens

<400> 573

Ile	Pro	Thr	Glu	Ile	Pro	Thr	Ser	Ala	Leu	Val	Lys	Glu	Thr	Leu	Ala
1				5					10					15	
Leu	Leu	Ser	Thr	His	Arg	Thr	Leu	Leu	Ile	Ala	Asn	Glu	Thr	Leu	Arg
			20					25					30		
Ile	Pro	Val	Pro	Val	His	Asn	Asn	His	Gln	Leu	Cys	Thr	Glu	Glu	Ile
		35					40					45			
Phe	Gln	Gly	Ile	Gly	Thr	Leu	Glu	Ser	Gln	Thr	Val	Gln	Gly	Gly	Thr
	50					55					60				
Val	Glu	Arg	Leu	Phe	Lys	Asn	Leu	Ser	Leu	Ile	Lys	Lys	Tyr	Ile	Asp
65					70					75					80
Gly	Gln	Lys	Lys	Lys	Cys	Gly	Glu	Glu	Arg	Arg	Arg	Val	Asn	Gln	Phe
				85					90					95	
Leu	Asp	Tyr	Leu	Gln	Glu	Phe	Leu	Gly	Val	Met	Asn	Thr	Glu	Trp	Ile
			100					105						110	

Ile Glu Ser  
115

<210> 574  
<211> 115  
<212> PRT  
<213> Homo sapiens

<400> 574

Ile	Pro	Thr	Glu	Ile	Pro	Thr	Ser	Ala	Leu	Val	Lys	Glu	Thr	Leu	Ala
1				5					10					15	
Leu	Leu	Ser	Thr	His	Arg	Thr	Leu	Leu	Ile	Ala	Asn	Glu	Thr	Leu	Arg
			20				25					30			
Ile	Pro	Val	Pro	Val	His	Lys	Asn	His	Gln	Leu	Cys	Thr	Gln	Glu	Ile
	35					40					45				
Phe	Gln	Gly	Ile	Gly	Thr	Leu	Glu	Ser	Gln	Thr	Val	Gln	Gly	Gly	Thr
50					55				60						
Val	Glu	Arg	Leu	Phe	Lys	Asn	Leu	Ser	Leu	Ile	Lys	Lys	Tyr	Ile	Asp
65					70				75					80	
Gly	Gln	Lys	Lys	Lys	Cys	Gly	Glu	Glu	Arg	Arg	Val	Asn	Gln	Phe	
			85					90					95		
Leu	Asp	Tyr	Leu	Gln	Glu	Phe	Leu	Gly	Val	Met	Asn	Thr	Glu	Trp	Ile
	100							105					110		

Ile Glu Ser  
115

<210> 575  
<211> 115  
<212> PRT  
<213> Homo sapiens

<400> 575

Ile	Pro	Thr	Glu	Ile	Pro	Thr	Ser	Ala	Leu	Val	Lys	Glu	Thr	Leu	Ala
1				5					10					15	
Leu	Leu	Ser	Thr	His	Arg	Thr	Leu	Leu	Ile	Ala	Asn	Glu	Thr	Leu	Arg
			20				25					30			
Ile	Pro	Val	Pro	Val	His	Lys	Asn	His	Gln	Leu	Cys	Thr	Asn	Glu	Ile
	35					40					45				
Phe	Gln	Gly	Ile	Gly	Thr	Leu	Glu	Ser	Gln	Thr	Val	Gln	Gly	Gly	Thr
50					55				60						
Val	Glu	Arg	Leu	Phe	Lys	Asn	Leu	Ser	Leu	Ile	Lys	Lys	Tyr	Ile	Asp
65					70				75					80	
Gly	Gln	Lys	Lys	Lys	Cys	Gly	Glu	Glu	Arg	Arg	Val	Asn	Gln	Phe	
			85					90					95		
Leu	Asp	Tyr	Leu	Gln	Glu	Phe	Leu	Gly	Val	Met	Asn	Thr	Glu	Trp	Ile
	100							105					110		

Ile Glu Ser  
115

<210> 576  
<211> 115  
<212> PRT  
<213> Homo sapiens

<400> 576

Ile	Pro	Thr	Glu	Ile	Pro	Thr	Ser	Ala	Leu	Val	Lys	Glu	Thr	Leu	Ala
1				5					10					15	
Leu	Leu	Ser	Thr	His	Arg	Thr	Leu	Leu	Ile	Ala	Asn	Glu	Thr	Leu	Arg
			20				25					30			
Ile	Pro	Val	Pro	Val	His	Lys	Asn	His	Gln	Leu	Cys	Thr	His	Glu	Ile
	35					40					45				
Phe	Gln	Gly	Ile	Gly	Thr	Leu	Glu	Ser	Gln	Thr	Val	Gln	Gly	Gly	Thr
50					55				60						

Val Glu Arg Leu Phe Asn Leu Ser Leu Ile Lys Lys Tyr Asp  
65 70 75 80  
Gly Gln Lys Lys Lys Cys Gly Glu Glu Arg Arg Val Asn Gln Phe  
85 90 95  
Leu Asp Tyr Leu Gln Glu Phe Leu Gly Val Met Asn Thr Glu Trp Ile  
100 105 110  
Ile Glu Ser  
115

<210> 577  
<211> 115  
<212> PRT  
<213> Homo sapiens

<400> 577  
Ile Pro Thr Glu Ile Pro Thr Ser Ala Leu Val Lys Glu Thr Leu Ala  
1 5 10 15  
Leu Leu Ser Thr His Arg Thr Leu Leu Ile Ala Asn Glu Thr Leu Arg  
20 25 30  
Ile Pro Val Pro Val His Lys Asn His Gln Leu Cys Thr Glu Gln Ile  
35 40 45  
Phe Gln Gly Ile Gly Thr Leu Glu Ser Gln Thr Val Gln Gly Gly Thr  
50 55 60  
Val Glu Arg Leu Phe Lys Asn Leu Ser Leu Ile Lys Lys Tyr Ile Asp  
65 70 75 80  
Gly Gln Lys Lys Lys Cys Gly Glu Glu Arg Arg Val Asn Gln Phe  
85 90 95  
Leu Asp Tyr Leu Gln Glu Phe Leu Gly Val Met Asn Thr Glu Trp Ile  
100 105 110  
Ile Glu Ser  
115

<210> 578  
<211> 115  
<212> PRT  
<213> Homo sapiens

<400> 578  
Ile Pro Thr Glu Ile Pro Thr Ser Ala Leu Val Lys Glu Thr Leu Ala  
1 5 10 15  
Leu Leu Ser Thr His Arg Thr Leu Leu Ile Ala Asn Glu Thr Leu Arg  
20 25 30  
Ile Pro Val Pro Val His Lys Asn His Gln Leu Cys Thr Glu Asn Ile  
35 40 45  
Phe Gln Gly Ile Gly Thr Leu Glu Ser Gln Thr Val Gln Gly Gly Thr  
50 55 60  
Val Glu Arg Leu Phe Lys Asn Leu Ser Leu Ile Lys Lys Tyr Ile Asp  
65 70 75 80  
Gly Gln Lys Lys Lys Cys Gly Glu Glu Arg Arg Arg Val Asn Gln Phe  
85 90 95  
Leu Asp Tyr Leu Gln Glu Phe Leu Gly Val Met Asn Thr Glu Trp Ile  
100 105 110  
Ile Glu Ser  
115

<210> 579  
<211> 115  
<212> PRT  
<213> Homo sapiens

<400> 579  
Ile Pro Thr Glu Ile Pro Thr Ser Ala Leu Val Lys Glu Thr Leu Ala  
1 5 10 15

Leu Leu Ser Thr His Arg Thr Leu Leu Ile Ala Asn Glu Thr Arg  
                   20                  25                  30  
 Ile Pro Val Pro Val His Lys Asn His Gln Leu Cys Thr Glu His Ile  
                   35                  40                  45  
 Phe Gln Gly Ile Gly Thr Leu Glu Ser Gln Thr Val Gln Gly Gly Thr  
                   50                  55                  60  
 Val Glu Arg Leu Phe Lys Asn Leu Ser Leu Ile Lys Lys Tyr Ile Asp  
   65                  70                  75                  80  
 Gly Gln Lys Lys Lys Cys Gly Glu Glu Arg Arg Arg Val Asn Gln Phe  
                   85                  90                  95  
 Leu Asp Tyr Leu Gln Glu Phe Leu Gly Val Met Asn Thr Glu Trp Ile  
                   100                  105                  110  
 Ile Glu Ser  
                   115

<210> 580  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 580  
 Ile Pro Thr Glu Ile Pro Thr Ser Ala Leu Val Lys Glu Thr Leu Ala  
   1                  5                  10                  15  
 Leu Leu Ser Thr His Arg Thr Leu Leu Ile Ala Asn Glu Thr Leu Arg  
                   20                  25                  30  
 Ile Pro Val Pro Val His Lys Asn His Gln Leu Cys Thr Glu Glu Ile  
                   35                  40                  45  
 Phe Gln Gly Ile Gly Thr Leu Gln Ser Gln Thr Val Gln Gly Gly Thr  
                   50                  55                  60  
 Val Glu Arg Leu Phe Lys Asn Leu Ser Leu Ile Lys Lys Tyr Ile Asp  
   65                  70                  75                  80  
 Gly Gln Lys Lys Lys Cys Gly Glu Glu Arg Arg Arg Val Asn Gln Phe  
                   85                  90                  95  
 Leu Asp Tyr Leu Gln Glu Phe Leu Gly Val Met Asn Thr Glu Trp Ile  
                   100                  105                  110  
 Ile Glu Ser  
                   115

<210> 581  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 581  
 Ile Pro Thr Glu Ile Pro Thr Ser Ala Leu Val Lys Glu Thr Leu Ala  
   1                  5                  10                  15  
 Leu Leu Ser Thr His Arg Thr Leu Leu Ile Ala Asn Glu Thr Leu Arg  
                   20                  25                  30  
 Ile Pro Val Pro Val His Lys Asn His Gln Leu Cys Thr Glu Glu Ile  
                   35                  40                  45  
 Phe Gln Gly Ile Gly Thr Leu Asn Ser Gln Thr Val Gln Gly Gly Thr  
                   50                  55                  60  
 Val Glu Arg Leu Phe Lys Asn Leu Ser Leu Ile Lys Lys Tyr Ile Asp  
   65                  70                  75                  80  
 Gly Gln Lys Lys Lys Cys Gly Glu Glu Arg Arg Arg Val Asn Gln Phe  
                   85                  90                  95  
 Leu Asp Tyr Leu Gln Glu Phe Leu Gly Val Met Asn Thr Glu Trp Ile  
                   100                  105                  110  
 Ile Glu Ser  
                   115

<210> 582  
 <211> 115

<212> PRT  
<213> Homo sapiens

<400> 582

Ile	Pro	Thr	Glu	Ile	Pro	Thr	Ser	Ala	Leu	Val	Lys	Glu	Thr	Leu	Ala
1				5					10					15	
Leu	Leu	Ser	Thr	His	Arg	Thr	Leu	Leu	Ile	Ala	Asn	Glu	Thr	Leu	Arg
			20					25					30		
Ile	Pro	Val	Pro	Val	His	Lys	Asn	His	Gln	Leu	Cys	Thr	Glu	Glu	Ile
		35					40					45			
Phe	Gln	Gly	Ile	Gly	Thr	Leu	His	Ser	Gln	Thr	Val	Gln	Gly	Gly	Thr
	50					55					60				
Val	Glu	Arg	Leu	Phe	Lys	Asn	Leu	Ser	Leu	Ile	Lys	Lys	Tyr	Ile	Asp
65					70					75					80
Gly	Gln	Lys	Lys	Lys	Cys	Gly	Glu	Glu	Arg	Arg	Arg	Val	Asn	Gln	Phe
				85					90					95	
Leu	Asp	Tyr	Leu	Gln	Glu	Phe	Leu	Gly	Val	Met	Asn	Thr	Glu	Trp	Ile
			100					105						110	
Ile	Glu	Ser													
															115

<210> 583  
<211> 115  
<212> PRT  
<213> Homo sapiens

<400> 583

Ile	Pro	Thr	Glu	Ile	Pro	Thr	Ser	Ala	Leu	Val	Lys	Glu	Thr	Leu	Ala
1				5					10					15	
Leu	Leu	Ser	Thr	His	Arg	Thr	Leu	Leu	Ile	Ala	Asn	Glu	Thr	Leu	Arg
			20					25					30		
Ile	Pro	Val	Pro	Val	His	Lys	Asn	His	Gln	Leu	Cys	Thr	Glu	Glu	Ile
		35					40					45			
Phe	Gln	Gly	Ile	Gly	Thr	Leu	Glu	Ser	Gln	Thr	Val	Gln	Gly	Gly	Thr
	50					55					60				
Val	Glu	Arg	Leu	Phe	Lys	Asn	Leu	Ser	Leu	Ile	Lys	Lys	Tyr	Ile	Asp
65					70					75					80
Gly	Gln	Lys	Gln	Lys	Cys	Gly	Glu	Glu	Arg	Arg	Arg	Val	Asn	Gln	Phe
				85					90					95	
Leu	Asp	Tyr	Leu	Gln	Glu	Phe	Leu	Gly	Val	Met	Asn	Thr	Glu	Trp	Ile
			100					105						110	
Ile	Glu	Ser													
															115

<210> 584  
<211> 115  
<212> PRT  
<213> Homo sapiens

<400> 584

Ile	Pro	Thr	Glu	Ile	Pro	Thr	Ser	Ala	Leu	Val	Lys	Glu	Thr	Leu	Ala
1				5					10					15	
Leu	Leu	Ser	Thr	His	Arg	Thr	Leu	Leu	Ile	Ala	Asn	Glu	Thr	Leu	Arg
			20					25					30		
Ile	Pro	Val	Pro	Val	His	Lys	Asn	His	Gln	Leu	Cys	Thr	Glu	Glu	Ile
		35					40					45			
Phe	Gln	Gly	Ile	Gly	Thr	Leu	Glu	Ser	Gln	Thr	Val	Gln	Gly	Gly	Thr
	50					55					60				
Val	Glu	Arg	Leu	Phe	Lys	Asn	Leu	Ser	Leu	Ile	Lys	Lys	Tyr	Ile	Asp
65					70					75					80
Gly	Gln	Lys	Asn	Lys	Cys	Gly	Glu	Glu	Arg	Arg	Arg	Val	Asn	Gln	Phe
				85					90					95	
Leu	Asp	Tyr	Leu	Gln	Glu	Phe	Leu	Gly	Val	Met	Asn	Thr	Glu	Trp	Ile

Ile Glu Ser  
115

100

105

110

<210> 585  
<211> 115  
<212> PRT  
<213> Homo sapiens

<400> 585  
Ile Pro Thr Glu Ile Pro Thr Ser Ala Leu Val Lys Glu Thr Leu Ala  
1 5 10 15  
Leu Leu Ser Thr His Arg Thr Leu Leu Ile Ala Asn Glu Thr Leu Arg  
20 25 30  
Ile Pro Val Pro Val His Lys Asn His Gln Leu Cys Thr Glu Glu Ile  
35 40 45  
Phe Gln Gly Ile Gly Thr Leu Glu Ser Gln Thr Val Gln Gly Gly Thr  
50 55 60  
Val Glu Arg Leu Phe Lys Asn Leu Ser Leu Ile Lys Lys Tyr Ile Asp  
65 70 75 80  
Gly Gln Lys Lys Gln Cys Gly Glu Glu Arg Arg Val Asn Gln Phe  
85 90 95  
Leu Asp Tyr Leu Gln Glu Phe Leu Gly Val Met Asn Thr Glu Trp Ile  
100 105 110  
Ile Glu Ser  
115

<210> 586  
<211> 115  
<212> PRT  
<213> Homo sapiens

<400> 586  
Ile Pro Thr Glu Ile Pro Thr Ser Ala Leu Val Lys Glu Thr Leu Ala  
1 5 10 15  
Leu Leu Ser Thr His Arg Thr Leu Leu Ile Ala Asn Glu Thr Leu Arg  
20 25 30  
Ile Pro Val Pro Val His Lys Asn His Gln Leu Cys Thr Glu Glu Ile  
35 40 45  
Phe Gln Gly Ile Gly Thr Leu Glu Ser Gln Thr Val Gln Gly Gly Thr  
50 55 60  
Val Glu Arg Leu Phe Lys Asn Leu Ser Leu Ile Lys Lys Tyr Ile Asp  
65 70 75 80  
Gly Gln Lys Lys Asn Cys Gly Glu Glu Arg Arg Val Asn Gln Phe  
85 90 95  
Leu Asp Tyr Leu Gln Glu Phe Leu Gly Val Met Asn Thr Glu Trp Ile  
100 105 110  
Ile Glu Ser  
115

<210> 587  
<211> 115  
<212> PRT  
<213> Homo sapiens

<400> 587  
Ile Pro Thr Glu Ile Pro Thr Ser Ala Leu Val Lys Glu Thr Leu Ala  
1 5 10 15  
Leu Leu Ser Thr His Arg Thr Leu Leu Ile Ala Asn Glu Thr Leu Arg  
20 25 30  
Ile Pro Val Pro Val His Lys Asn His Gln Leu Cys Thr Glu Glu Ile  
35 40 45  
Phe Gln Gly Ile Gly Thr Leu Glu Ser Gln Thr Val Gln Gly Gly Thr

50                      55                      60  
 Val Glu Arg Leu Phe Lys Asn Leu Ser Leu Ile Lys Lys Tyr Ile Asp  
 65                      70                      75                      80  
 Gly Gln Lys Lys Lys Cys Gly Gln Glu Arg Arg Arg Val Asn Gln Phe  
                     85                      90                      95  
 Leu Asp Tyr Leu Gln Glu Phe Leu Gly Val Met Asn Thr Glu Trp Ile  
                     100                      105                      110  
 Ile Glu Ser  
                     115

<210> 588  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 588  
 Ile Pro Thr Glu Ile Pro Thr Ser Ala Leu Val Lys Glu Thr Leu Ala  
 1                      5                      10                      15  
 Leu Leu Ser Thr His Arg Thr Leu Leu Ile Ala Asn Glu Thr Leu Arg  
                     20                      25                      30  
 Ile Pro Val Pro Val His Lys Asn His Gln Leu Cys Thr Glu Glu Ile  
                     35                      40                      45  
 Phe Gln Gly Ile Gly Thr Leu Glu Ser Gln Thr Val Gln Gly Gly Thr  
                     50                      55                      60  
 Val Glu Arg Leu Phe Lys Asn Leu Ser Leu Ile Lys Lys Tyr Ile Asp  
 65                      70                      75                      80  
 Gly Gln Lys Lys Lys Cys Gly Asn Glu Arg Arg Arg Val Asn Gln Phe  
                     85                      90                      95  
 Leu Asp Tyr Leu Gln Glu Phe Leu Gly Val Met Asn Thr Glu Trp Ile  
                     100                      105                      110  
 Ile Glu Ser  
                     115

<210> 589  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 589  
 Ile Pro Thr Glu Ile Pro Thr Ser Ala Leu Val Lys Glu Thr Leu Ala  
 1                      5                      10                      15  
 Leu Leu Ser Thr His Arg Thr Leu Leu Ile Ala Asn Glu Thr Leu Arg  
                     20                      25                      30  
 Ile Pro Val Pro Val His Lys Asn His Gln Leu Cys Thr Glu Glu Ile  
                     35                      40                      45  
 Phe Gln Gly Ile Gly Thr Leu Glu Ser Gln Thr Val Gln Gly Gly Thr  
                     50                      55                      60  
 Val Glu Arg Leu Phe Lys Asn Leu Ser Leu Ile Lys Lys Tyr Ile Asp  
 65                      70                      75                      80  
 Gly Gln Lys Lys Lys Cys Gly His Glu Arg Arg Arg Val Asn Gln Phe  
                     85                      90                      95  
 Leu Asp Tyr Leu Gln Glu Phe Leu Gly Val Met Asn Thr Glu Trp Ile  
                     100                      105                      110  
 Ile Glu Ser  
                     115

<210> 590  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 590  
 Ile Pro Thr Glu Ile Pro Thr Ser Ala Leu Val Lys Glu Thr Leu Ala



1	5	10																	
Leu	Leu	Ser	Thr	His	Arg	Thr	Leu	Leu	Ile	Ala	Asn	Glu	Thr	Leu	Arg				
			20					25					30						
Ile	Pro	Val	Pro	Val	His	Lys	Asn	His	Gln	Leu	Cys	Thr	Glu	Glu	Ile				
		35					40					45							
Phe	Gln	Gly	Ile	Gly	Thr	Leu	Glu	Ser	Gln	Thr	Val	Gln	Gly	Gly	Thr				
		50				55					60								
Val	Glu	Arg	Leu	Phe	Lys	Asn	Leu	Ser	Leu	Ile	Lys	Lys	Tyr	Ile	Asp				
65					70				75						80				
Gly	Gln	Lys	Lys	Lys	Cys	Gly	Glu	Gln	Arg	Arg	Arg	Val	Asn	Gln	Phe				
				85				90						95					
Leu	Asp	Tyr	Leu	Gln	Glu	Phe	Leu	Gly	Val	Met	Asn	Thr	Glu	Trp	Ile				
			100					105					110						
Ile	Glu	Ser																	
		115																	

<210> 591  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 591																			
Ile	Pro	Thr	Glu	Ile	Pro	Thr	Ser	Ala	Leu	Val	Lys	Glu	Thr	Leu	Ala				
1				5					10					15					
Leu	Leu	Ser	Thr	His	Arg	Thr	Leu	Leu	Ile	Ala	Asn	Glu	Thr	Leu	Arg				
			20					25					30						
Ile	Pro	Val	Pro	Val	His	Lys	Asn	His	Gln	Leu	Cys	Thr	Glu	Glu	Ile				
		35					40					45							
Phe	Gln	Gly	Ile	Gly	Thr	Leu	Glu	Ser	Gln	Thr	Val	Gln	Gly	Gly	Thr				
		50				55					60								
Val	Glu	Arg	Leu	Phe	Lys	Asn	Leu	Ser	Leu	Ile	Lys	Lys	Tyr	Ile	Asp				
65					70				75						80				
Gly	Gln	Lys	Lys	Lys	Cys	Gly	Glu	Asn	Arg	Arg	Arg	Val	Asn	Gln	Phe				
				85				90						95					
Leu	Asp	Tyr	Leu	Gln	Glu	Phe	Leu	Gly	Val	Met	Asn	Thr	Glu	Trp	Ile				
			100					105					110						
Ile	Glu	Ser																	
		115																	

<210> 592  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 592																			
Ile	Pro	Thr	Glu	Ile	Pro	Thr	Ser	Ala	Leu	Val	Lys	Glu	Thr	Leu	Ala				
1				5					10					15					
Leu	Leu	Ser	Thr	His	Arg	Thr	Leu	Leu	Ile	Ala	Asn	Glu	Thr	Leu	Arg				
			20					25					30						
Ile	Pro	Val	Pro	Val	His	Lys	Asn	His	Gln	Leu	Cys	Thr	Glu	Glu	Ile				
		35					40					45							
Phe	Gln	Gly	Ile	Gly	Thr	Leu	Glu	Ser	Gln	Thr	Val	Gln	Gly	Gly	Thr				
		50				55					60								
Val	Glu	Arg	Leu	Phe	Lys	Asn	Leu	Ser	Leu	Ile	Lys	Lys	Tyr	Ile	Asp				
65					70				75						80				
Gly	Gln	Lys	Lys	Lys	Cys	Gly	Glu	His	Arg	Arg	Arg	Val	Asn	Gln	Phe				
				85				90						95					
Leu	Asp	Tyr	Leu	Gln	Glu	Phe	Leu	Gly	Val	Met	Asn	Thr	Glu	Trp	Ile				
			100					105					110						
Ile	Glu	Ser																	
		115																	

<210> 593

<211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 593

Ile	Pro	Thr	Glu	Ile	Pro	Thr	Ser	Ala	Leu	Val	Lys	Glu	Thr	Leu	Ala
1				5					10					15	
Leu	Leu	Ser	Thr	His	Arg	Thr	Leu	Leu	Ile	Ala	Asn	Glu	Thr	Leu	Arg
			20				25						30		
Ile	Pro	Val	Pro	Val	His	Lys	Asn	His	Gln	Leu	Cys	Thr	Glu	Glu	Ile
		35				40						45			
Phe	Gln	Gly	Ile	Gly	Thr	Leu	Glu	Ser	Gln	Thr	Val	Gln	Gly	Gly	Thr
		50			55					60					
Val	Glu	Arg	Leu	Phe	Lys	Asn	Leu	Ser	Leu	Ile	Lys	Lys	Tyr	Ile	Asp
65					70				75						80
Gly	Gln	Lys	Lys	Lys	Cys	Gly	Glu	Glu	His	Arg	Arg	Val	Asn	Gln	Phe
			85						90					95	
Leu	Asp	Tyr	Leu	Gln	Glu	Phe	Leu	Gly	Val	Met	Asn	Thr	Glu	Trp	Ile
			100					105					110		
Ile	Glu	Ser													
															115

<210> 594  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 594

Ile	Pro	Thr	Glu	Ile	Pro	Thr	Ser	Ala	Leu	Val	Lys	Glu	Thr	Leu	Ala
1				5					10					15	
Leu	Leu	Ser	Thr	His	Arg	Thr	Leu	Leu	Ile	Ala	Asn	Glu	Thr	Leu	Arg
			20				25						30		
Ile	Pro	Val	Pro	Val	His	Lys	Asn	His	Gln	Leu	Cys	Thr	Glu	Glu	Ile
		35				40						45			
Phe	Gln	Gly	Ile	Gly	Thr	Leu	Glu	Ser	Gln	Thr	Val	Gln	Gly	Gly	Thr
		50			55					60					
Val	Glu	Arg	Leu	Phe	Lys	Asn	Leu	Ser	Leu	Ile	Lys	Lys	Tyr	Ile	Asp
65					70				75						80
Gly	Gln	Lys	Lys	Lys	Cys	Gly	Glu	Glu	Gln	Arg	Arg	Val	Asn	Gln	Phe
			85						90					95	
Leu	Asp	Tyr	Leu	Gln	Glu	Phe	Leu	Gly	Val	Met	Asn	Thr	Glu	Trp	Ile
			100					105					110		
Ile	Glu	Ser													
															115

<210> 595  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 595

Ile	Pro	Thr	Glu	Ile	Pro	Thr	Ser	Ala	Leu	Val	Lys	Glu	Thr	Leu	Ala
1				5					10					15	
Leu	Leu	Ser	Thr	His	Arg	Thr	Leu	Leu	Ile	Ala	Asn	Glu	Thr	Leu	Arg
			20				25						30		
Ile	Pro	Val	Pro	Val	His	Lys	Asn	His	Gln	Leu	Cys	Thr	Glu	Glu	Ile
		35				40						45			
Phe	Gln	Gly	Ile	Gly	Thr	Leu	Glu	Ser	Gln	Thr	Val	Gln	Gly	Gly	Thr
		50			55					60					
Val	Glu	Arg	Leu	Phe	Lys	Asn	Leu	Ser	Leu	Ile	Lys	Lys	Tyr	Ile	Asp
65					70				75						80
Gly	Gln	Lys	Lys	Lys	Cys	Gly	Glu	Glu	Arg	Arg	Arg	Val	Asn	Gln	Phe
			85						90					95	

Leu Asp Tyr Leu Gln Phe Leu Gly Val Met Asn Thr Glu Ile  
 100 105 110  
 Ile Glu Ser  
 115

<210> 596  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 596  
 Ile Pro Thr Glu Ile Pro Thr Ser Ala Leu Val Lys Glu Thr Leu Ala  
 1 5 10 15  
 Leu Leu Ser Thr His Arg Thr Leu Leu Ile Ala Asn Glu Thr Leu Arg  
 20 25 30  
 Ile Pro Val Pro Val His Lys Asn His Gln Leu Cys Thr Glu Glu Ile  
 35 40 45  
 Phe Gln Gly Ile Gly Thr Leu Glu Ser Gln Thr Val Gln Gly Gly Thr  
 50 55 60  
 Val Glu Arg Leu Phe Lys Asn Leu Ser Leu Ile Lys Lys Tyr Ile Asp  
 65 70 75 80  
 Gly Gln Lys Lys Lys Cys Gly Glu Glu Arg Arg Arg Val Asn Gln Phe  
 85 90 95  
 Leu Asp Tyr Leu Gln Asn Phe Leu Gly Val Met Asn Thr Glu Trp Ile  
 100 105 110  
 Ile Glu Ser  
 115

<210> 597  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 597  
 Ile Pro Thr Glu Ile Pro Thr Ser Ala Leu Val Lys Glu Thr Leu Ala  
 1 5 10 15  
 Leu Leu Ser Thr His Arg Thr Leu Leu Ile Ala Asn Glu Thr Leu Arg  
 20 25 30  
 Ile Pro Val Pro Val His Lys Asn His Gln Leu Cys Thr Glu Glu Ile  
 35 40 45  
 Phe Gln Gly Ile Gly Thr Leu Glu Ser Gln Thr Val Gln Gly Gly Thr  
 50 55 60  
 Val Glu Arg Leu Phe Lys Asn Leu Ser Leu Ile Lys Lys Tyr Ile Asp  
 65 70 75 80  
 Gly Gln Lys Lys Lys Cys Gly Glu Glu Arg Arg Arg Val Asn Gln Phe  
 85 90 95  
 Leu Asp Tyr Leu Gln His Phe Leu Gly Val Met Asn Thr Glu Trp Ile  
 100 105 110  
 Ile Glu Ser  
 115

<210> 598  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 598  
 Ile Pro Thr Glu Ile Pro Thr Ser Ala Leu Val Lys Glu Thr Leu Ala  
 1 5 10 15  
 Leu Leu Ser Thr His Arg Thr Leu Leu Ile Ala Asn Glu Thr Leu Arg  
 20 25 30  
 Ile Pro Val Pro Val His Lys Asn His Gln Leu Cys Thr Glu Glu Ile  
 35 40 45

Phe Gln Gly Ile Gly Leu Glu Ser Gln Thr Val Gln Gly Thr  
 50 55 60  
 Val Glu Arg Leu Phe Lys Asn Leu Ser Leu Ile Lys Lys Tyr Ile Asp  
 65 70 75 80  
 Gly Gln Lys Lys Lys Cys Gly Glu Glu Arg Arg Arg Val Asn Gln Phe  
 85 90 95  
 Leu Asp Tyr Leu Gln Glu Phe Leu Gly Val Met Asn Thr Gln Trp Ile  
 100 105 110  
 Ile Glu Ser  
 115

<210> 599  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 599  
 Ile Pro Thr Glu Ile Pro Thr Ser Ala Leu Val Lys Glu Thr Leu Ala  
 1 5 10 15  
 Leu Leu Ser Thr His Arg Thr Leu Leu Ile Ala Asn Glu Thr Leu Arg  
 20 25 30  
 Ile Pro Val Pro Val His Lys Asn His Gln Leu Cys Thr Glu Glu Ile  
 35 40 45  
 Phe Gln Gly Ile Gly Thr Leu Glu Ser Gln Thr Val Gln Gly Gly Thr  
 50 55 60  
 Val Glu Arg Leu Phe Lys Asn Leu Ser Leu Ile Lys Lys Tyr Ile Asp  
 65 70 75 80  
 Gly Gln Lys Lys Lys Cys Gly Glu Glu Arg Arg Arg Val Asn Gln Phe  
 85 90 95  
 Leu Asp Tyr Leu Gln Glu Phe Leu Gly Val Met Asn Thr Asn Trp Ile  
 100 105 110  
 Ile Glu Ser  
 115

<210> 600  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 600  
 Ile Pro Thr Glu Ile Pro Thr Ser Ala Leu Val Lys Glu Thr Leu Ala  
 1 5 10 15  
 Leu Leu Ser Thr His Arg Thr Leu Leu Ile Ala Asn Glu Thr Leu Arg  
 20 25 30  
 Ile Pro Val Pro Val His Lys Asn His Gln Leu Cys Thr Glu Glu Ile  
 35 40 45  
 Phe Gln Gly Ile Gly Thr Leu Glu Ser Gln Thr Val Gln Gly Gly Thr  
 50 55 60  
 Val Glu Arg Leu Phe Lys Asn Leu Ser Leu Ile Lys Lys Tyr Ile Asp  
 65 70 75 80  
 Gly Gln Lys Lys Lys Cys Gly Glu Glu Arg Arg Arg Val Asn Gln Phe  
 85 90 95  
 Leu Asp Tyr Leu Gln Glu Phe Leu Gly Val Met Asn Thr His Trp Ile  
 100 105 110  
 Ile Glu Ser  
 115

<210> 601  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 601

Ile Pro Thr Glu Ile Thr Ser Ala Leu Val Lys Glu Thr Ala  
 1 5 10 15  
 Leu Leu Ser Thr His Arg Thr Leu Leu Ile Ala Asn Glu Thr Leu Arg  
 20 25 30  
 Ile Pro Val Pro Val His Lys Asn His Gln Leu Cys Thr Glu Glu Ile  
 35 40 45  
 Phe Gln Gly Ile Gly Thr Leu Glu Ser Gln Thr Val Gln Gly Gly Thr  
 50 55 60  
 Val Glu Arg Leu Phe Lys Asn Leu Ser Leu Ile Lys Lys Tyr Ile Asp  
 65 70 75 80  
 Gly Gln Lys Lys Lys Cys Gly Glu Glu Arg Arg Arg Val Asn Gln Phe  
 85 90 95  
 Leu Asp Tyr Leu Gln Glu Phe Leu Gly Val Met Asn Thr Glu Ser Ile  
 100 105 110  
 Ile Glu Ser  
 115

<210> 602  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 602  
 Ile Pro Thr Glu Ile Pro Thr Ser Ala Leu Val Lys Glu Thr Leu Ala  
 1 5 10 15  
 Leu Leu Ser Thr His Arg Thr Leu Leu Ile Ala Asn Glu Thr Leu Arg  
 20 25 30  
 Ile Pro Val Pro Val His Lys Asn His Gln Leu Cys Thr Glu Glu Ile  
 35 40 45  
 Phe Gln Gly Ile Gly Thr Leu Glu Ser Gln Thr Val Gln Gly Gly Thr  
 50 55 60  
 Val Glu Arg Leu Phe Lys Asn Leu Ser Leu Ile Lys Lys Tyr Ile Asp  
 65 70 75 80  
 Gly Gln Lys Lys Lys Cys Gly Glu Glu Arg Arg Arg Val Asn Gln Phe  
 85 90 95  
 Leu Asp Tyr Leu Gln Glu Phe Leu Gly Val Met Asn Thr Glu His Ile  
 100 105 110  
 Ile Glu Ser  
 115

<210> 603  
 <211> 112  
 <212> PRT  
 <213> homo sapiens

<400> 603  
 Gly Pro Val Pro Pro Ser Thr Ala Leu Arg Glu Leu Ile Glu Glu Leu  
 1 5 10 15  
 Val Asn Ile Thr Gln Asn Gln Lys Ala Pro Leu Cys Asn Gly Ser Val  
 20 25 30  
 Val Trp Ser Ile Asn Leu Thr Ala Gly Met Tyr Cys Ala Ala Leu Glu  
 35 40 45  
 Ser Leu Ile Asn Val Ser Gly Cys Ser Ala Ile Glu Lys Thr Gln Arg  
 50 55 60  
 Met Leu Ser Gly Phe Cys Pro His Lys Val Ser Ala Gly Gln Phe Ser  
 65 70 75 80  
 Ser Leu His Val Arg Asp Thr Lys Ile Glu Val Ala Gln Phe Val Lys  
 85 90 95  
 Asp Leu Leu Leu His Leu Lys Lys Leu Phe Arg Glu Gly Arg Phe Asn  
 100 105 110

<210> 604  
 <211> 112

<212> PRT  
<213> homo sapiens

<400> 604

Gly	Pro	Val	Pro	Pro	Ser	Thr	Ala	Leu	Arg	Glu	Leu	Ile	Glu	Glu	Leu
1				5					10					15	
Val	Asn	Ile	Thr	Gln	Asn	Gln	Lys	Ala	Pro	Leu	Cys	Asn	Gly	Ser	Ile
			20					25					30		
Val	Trp	Ser	Ile	Asn	Leu	Thr	Ala	Gly	Met	Tyr	Cys	Ala	Ala	Leu	Glu
		35					40					45			
Ser	Leu	Ile	Asn	Val	Ser	Gly	Cys	Ser	Ala	Ile	Glu	Lys	Thr	Gln	Arg
	50					55					60				
Met	Leu	Ser	Gly	Phe	Cys	Pro	His	Lys	Val	Ser	Ala	Gly	Gln	Phe	Ser
65					70					75					80
Ser	Leu	His	Val	Arg	Asp	Thr	Lys	Ile	Glu	Val	Ala	Gln	Phe	Val	Lys
				85					90					95	
Asp	Leu	Leu	Leu	His	Leu	Lys	Lys	Leu	Phe	Arg	Glu	Gly	Arg	Phe	Asn
			100					105						110	

<210> 605

<211> 112

<212> PRT

<213> homo sapiens

<400> 605

Gly	Pro	Val	Pro	Pro	Ser	Thr	Ala	Leu	Arg	Glu	Leu	Ile	Glu	Glu	Leu
1				5					10					15	
Val	Asn	Ile	Thr	Gln	Asn	Gln	Lys	Ala	Pro	Leu	Cys	Asn	Gly	Ser	Met
			20					25					30		
Val	Ser	Ser	Ile	Asn	Leu	Thr	Ala	Gly	Met	Tyr	Cys	Ala	Ala	Leu	Glu
		35					40					45			
Ser	Leu	Ile	Asn	Val	Ser	Gly	Cys	Ser	Ala	Ile	Glu	Lys	Thr	Gln	Arg
	50					55					60				
Met	Leu	Ser	Gly	Phe	Cys	Pro	His	Lys	Val	Ser	Ala	Gly	Gln	Phe	Ser
65					70					75					80
Ser	Leu	His	Val	Arg	Asp	Thr	Lys	Ile	Glu	Val	Ala	Gln	Phe	Val	Lys
				85					90					95	
Asp	Leu	Leu	Leu	His	Leu	Lys	Lys	Leu	Phe	Arg	Glu	Gly	Arg	Phe	Asn
			100					105						110	

<210> 606

<211> 112

<212> PRT

<213> homo sapiens

<400> 606

Gly	Pro	Val	Pro	Pro	Ser	Thr	Ala	Leu	Arg	Glu	Leu	Ile	Glu	Glu	Leu
1				5					10					15	
Val	Asn	Ile	Thr	Gln	Asn	Gln	Lys	Ala	Pro	Leu	Cys	Asn	Gly	Ser	Met
			20					25					30		
Val	His	Ser	Ile	Asn	Leu	Thr	Ala	Gly	Met	Tyr	Cys	Ala	Ala	Leu	Glu
		35					40					45			
Ser	Leu	Ile	Asn	Val	Ser	Gly	Cys	Ser	Ala	Ile	Glu	Lys	Thr	Gln	Arg
	50					55					60				
Met	Leu	Ser	Gly	Phe	Cys	Pro	His	Lys	Val	Ser	Ala	Gly	Gln	Phe	Ser
65					70					75					80
Ser	Leu	His	Val	Arg	Asp	Thr	Lys	Ile	Glu	Val	Ala	Gln	Phe	Val	Lys
				85					90					95	
Asp	Leu	Leu	Leu	His	Leu	Lys	Lys	Leu	Phe	Arg	Glu	Gly	Arg	Phe	Asn
			100					105						110	

<210> 607

<211> 112

<212> PRT  
<213> homo sapiens

<400> 607

Gly	Pro	Val	Pro	Pro	Ser	Thr	Ala	Leu	Arg	Glu	Leu	Ile	Glu	Glu	Leu
1				5					10					15	
Val	Asn	Ile	Thr	Gln	Asn	Gln	Lys	Ala	Pro	Leu	Cys	Asn	Gly	Ser	Met
			20					25					30		
Val	Trp	Ser	Ile	Asn	Val	Thr	Ala	Gly	Met	Tyr	Cys	Ala	Ala	Leu	Glu
		35					40					45			
Ser	Leu	Ile	Asn	Val	Ser	Gly	Cys	Ser	Ala	Ile	Glu	Lys	Thr	Gln	Arg
	50					55					60				
Met	Leu	Ser	Gly	Phe	Cys	Pro	His	Lys	Val	Ser	Ala	Gly	Gln	Phe	Ser
65					70				75						80
Ser	Leu	His	Val	Arg	Asp	Thr	Lys	Ile	Glu	Val	Ala	Gln	Phe	Val	Lys
			85						90					95	
Asp	Leu	Leu	Leu	His	Leu	Lys	Lys	Leu	Phe	Arg	Glu	Gly	Arg	Phe	Asn
			100					105						110	

<210> 608  
<211> 112  
<212> PRT  
<213> homo sapiens

<400> 608

Gly	Pro	Val	Pro	Pro	Ser	Thr	Ala	Leu	Arg	Glu	Leu	Ile	Glu	Glu	Leu
1				5					10					15	
Val	Asn	Ile	Thr	Gln	Asn	Gln	Lys	Ala	Pro	Leu	Cys	Asn	Gly	Ser	Met
			20					25					30		
Val	Trp	Ser	Ile	Asn	Ile	Thr	Ala	Gly	Met	Tyr	Cys	Ala	Ala	Leu	Glu
		35					40					45			
Ser	Leu	Ile	Asn	Val	Ser	Gly	Cys	Ser	Ala	Ile	Glu	Lys	Thr	Gln	Arg
	50					55					60				
Met	Leu	Ser	Gly	Phe	Cys	Pro	His	Lys	Val	Ser	Ala	Gly	Gln	Phe	Ser
65					70				75						80
Ser	Leu	His	Val	Arg	Asp	Thr	Lys	Ile	Glu	Val	Ala	Gln	Phe	Val	Lys
			85						90					95	
Asp	Leu	Leu	Leu	His	Leu	Lys	Lys	Leu	Phe	Arg	Glu	Gly	Arg	Phe	Asn
			100					105						110	

<210> 609  
<211> 112  
<212> PRT  
<213> homo sapiens

<400> 609

Gly	Pro	Val	Pro	Pro	Ser	Thr	Ala	Leu	Arg	Glu	Leu	Ile	Glu	Glu	Leu
1				5					10					15	
Val	Asn	Ile	Thr	Gln	Asn	Gln	Lys	Ala	Pro	Leu	Cys	Asn	Gly	Ser	Met
			20					25					30		
Val	Trp	Ser	Ile	Asn	Leu	Thr	Ala	Gly	Met	Tyr	Cys	Ala	Ala	Leu	Gln
		35					40					45			
Ser	Leu	Ile	Asn	Val	Ser	Gly	Cys	Ser	Ala	Ile	Glu	Lys	Thr	Gln	Arg
	50					55					60				
Met	Leu	Ser	Gly	Phe	Cys	Pro	His	Lys	Val	Ser	Ala	Gly	Gln	Phe	Ser
65					70				75						80
Ser	Leu	His	Val	Arg	Asp	Thr	Lys	Ile	Glu	Val	Ala	Gln	Phe	Val	Lys
			85						90					95	
Asp	Leu	Leu	Leu	His	Leu	Lys	Lys	Leu	Phe	Arg	Glu	Gly	Arg	Phe	Asn
			100					105						110	

<210> 610  
<211> 112

<212> PRT  
<213> homo sapiens

<400> 610

Gly	Pro	Val	Pro	Pro	Ser	Thr	Ala	Leu	Arg	Glu	Leu	Ile	Glu	Glu	Leu
1				5					10					15	
Val	Asn	Ile	Thr	Gln	Asn	Gln	Lys	Ala	Pro	Leu	Cys	Asn	Gly	Ser	Met
			20					25					30		
Val	Trp	Ser	Ile	Asn	Leu	Thr	Ala	Gly	Met	Tyr	Cys	Ala	Ala	Leu	Asn
		35					40					45			
Ser	Leu	Ile	Asn	Val	Ser	Gly	Cys	Ser	Ala	Ile	Glu	Lys	Thr	Gln	Arg
		50				55					60				
Met	Leu	Ser	Gly	Phe	Cys	Pro	His	Lys	Val	Ser	Ala	Gly	Gln	Phe	Ser
65					70					75					80
Ser	Leu	His	Val	Arg	Asp	Thr	Lys	Ile	Glu	Val	Ala	Gln	Phe	Val	Lys
			85						90					95	
Asp	Leu	Leu	Leu	His	Leu	Lys	Lys	Leu	Phe	Arg	Glu	Gly	Arg	Phe	Asn
			100					105						110	

<210> 611  
<211> 112  
<212> PRT  
<213> homo sapiens

<400> 611

Gly	Pro	Val	Pro	Pro	Ser	Thr	Ala	Leu	Arg	Glu	Leu	Ile	Glu	Glu	Leu
1				5					10					15	
Val	Asn	Ile	Thr	Gln	Asn	Gln	Lys	Ala	Pro	Leu	Cys	Asn	Gly	Ser	Met
			20					25					30		
Val	Trp	Ser	Ile	Asn	Leu	Thr	Ala	Gly	Met	Tyr	Cys	Ala	Ala	Leu	His
		35					40					45			
Ser	Leu	Ile	Asn	Val	Ser	Gly	Cys	Ser	Ala	Ile	Glu	Lys	Thr	Gln	Arg
		50				55					60				
Met	Leu	Ser	Gly	Phe	Cys	Pro	His	Lys	Val	Ser	Ala	Gly	Gln	Phe	Ser
65					70					75					80
Ser	Leu	His	Val	Arg	Asp	Thr	Lys	Ile	Glu	Val	Ala	Gln	Phe	Val	Lys
			85						90					95	
Asp	Leu	Leu	Leu	His	Leu	Lys	Lys	Leu	Phe	Arg	Glu	Gly	Arg	Phe	Asn
			100					105						110	

<210> 612  
<211> 112  
<212> PRT  
<213> homo sapiens

<400> 612

Gly	Pro	Val	Pro	Pro	Ser	Thr	Ala	Leu	Arg	Glu	Leu	Ile	Glu	Glu	Leu
1				5					10					15	
Val	Asn	Ile	Thr	Gln	Asn	Gln	Lys	Ala	Pro	Leu	Cys	Asn	Gly	Ser	Met
			20					25					30		
Val	Trp	Ser	Ile	Asn	Leu	Thr	Ala	Gly	Met	Tyr	Cys	Ala	Ala	Leu	Glu
		35					40					45			
Ser	Leu	Ile	Asn	Val	Ser	Gly	Cys	Ser	Ala	Ile	Glu	Lys	Thr	Gln	Arg
		50				55					60				
Met	Leu	Ser	Gly	Phe	Cys	Pro	His	Lys	Val	Ser	Ala	Gly	Gln	Ile	Ser
65					70					75					80
Ser	Leu	His	Val	Arg	Asp	Thr	Lys	Ile	Glu	Val	Ala	Gln	Phe	Val	Lys
			85						90					95	
Asp	Leu	Leu	Leu	His	Leu	Lys	Lys	Leu	Phe	Arg	Glu	Gly	Arg	Phe	Asn
			100					105						110	

<210> 613  
<211> 112



<212> PRT  
<213> homo sapiens

<400> 613

Gly	Pro	Val	Pro	Pro	Ser	Thr	Ala	Leu	Arg	Glu	Leu	Ile	Glu	Glu	Leu
1				5					10					15	
Val	Asn	Ile	Thr	Gln	Asn	Gln	Lys	Ala	Pro	Leu	Cys	Asn	Gly	Ser	Met
			20					25					30		
Val	Trp	Ser	Ile	Asn	Leu	Thr	Ala	Gly	Met	Tyr	Cys	Ala	Ala	Leu	Glu
		35					40					45			
Ser	Leu	Ile	Asn	Val	Ser	Gly	Cys	Ser	Ala	Ile	Glu	Lys	Thr	Gln	Arg
	50					55					60				
Met	Leu	Ser	Gly	Phe	Cys	Pro	His	Lys	Val	Ser	Ala	Gly	Gln	Val	Ser
65					70					75					80
Ser	Leu	His	Val	Arg	Asp	Thr	Lys	Ile	Glu	Val	Ala	Gln	Phe	Val	Lys
				85					90					95	
Asp	Leu	Leu	Leu	His	Leu	Lys	Lys	Leu	Phe	Arg	Glu	Gly	Arg	Phe	Asn
			100					105						110	

<210> 614  
<211> 112  
<212> PRT  
<213> homo sapiens

<400> 614

Gly	Pro	Val	Pro	Pro	Ser	Thr	Ala	Leu	Arg	Glu	Leu	Ile	Glu	Glu	Leu
1				5					10					15	
Val	Asn	Ile	Thr	Gln	Asn	Gln	Lys	Ala	Pro	Leu	Cys	Asn	Gly	Ser	Met
			20					25					30		
Val	Trp	Ser	Ile	Asn	Leu	Thr	Ala	Gly	Met	Tyr	Cys	Ala	Ala	Leu	Glu
		35					40					45			
Ser	Leu	Ile	Asn	Val	Ser	Gly	Cys	Ser	Ala	Ile	Glu	Lys	Thr	Gln	Arg
	50					55					60				
Met	Leu	Ser	Gly	Phe	Cys	Pro	His	Lys	Val	Ser	Ala	Gly	Gln	Phe	Ser
65					70					75					80
Ser	Val	His	Val	Arg	Asp	Thr	Lys	Ile	Glu	Val	Ala	Gln	Phe	Val	Lys
				85					90					95	
Asp	Leu	Leu	Leu	His	Leu	Lys	Lys	Leu	Phe	Arg	Glu	Gly	Arg	Phe	Asn
			100					105						110	

<210> 615  
<211> 112  
<212> PRT  
<213> homo sapiens

<400> 615

Gly	Pro	Val	Pro	Pro	Ser	Thr	Ala	Leu	Arg	Glu	Leu	Ile	Glu	Glu	Leu
1				5					10					15	
Val	Asn	Ile	Thr	Gln	Asn	Gln	Lys	Ala	Pro	Leu	Cys	Asn	Gly	Ser	Met
			20					25					30		
Val	Trp	Ser	Ile	Asn	Leu	Thr	Ala	Gly	Met	Tyr	Cys	Ala	Ala	Leu	Glu
		35					40					45			
Ser	Leu	Ile	Asn	Val	Ser	Gly	Cys	Ser	Ala	Ile	Glu	Lys	Thr	Gln	Arg
	50					55					60				
Met	Leu	Ser	Gly	Phe	Cys	Pro	His	Lys	Val	Ser	Ala	Gly	Gln	Phe	Ser
65					70					75					80
Ser	Ile	His	Val	Arg	Asp	Thr	Lys	Ile	Glu	Val	Ala	Gln	Phe	Val	Lys
				85					90					95	
Asp	Leu	Leu	Leu	His	Leu	Lys	Lys	Leu	Phe	Arg	Glu	Gly	Arg	Phe	Asn
			100					105						110	

<210> 616  
<211> 112

<212> PRT  
<213> homo sapiens

<400> 616

Gly	Pro	Val	Pro	Pro	Ser	Thr	Ala	Leu	Arg	Glu	Leu	Ile	Glu	Glu	Leu
1				5					10					15	
Val	Asn	Ile	Thr	Gln	Asn	Gln	Lys	Ala	Pro	Leu	Cys	Asn	Gly	Ser	Met
		20						25					30		
Val	Trp	Ser	Ile	Asn	Leu	Thr	Ala	Gly	Met	Tyr	Cys	Ala	Ala	Leu	Glu
		35					40					45			
Ser	Leu	Ile	Asn	Val	Ser	Gly	Cys	Ser	Ala	Ile	Glu	Lys	Thr	Gln	Arg
	50					55					60				
Met	Leu	Ser	Gly	Phe	Cys	Pro	His	Lys	Val	Ser	Ala	Gly	Gln	Phe	Ser
65					70					75					80
Ser	Leu	His	Val	His	Asp	Thr	Lys	Ile	Glu	Val	Ala	Gln	Phe	Val	Lys
			85					90					95		
Asp	Leu	Leu	Leu	His	Leu	Lys	Lys	Leu	Phe	Arg	Glu	Gly	Arg	Phe	Asn
			100					105					110		

<210> 617  
<211> 112  
<212> PRT  
<213> homo sapiens

<400> 617

Gly	Pro	Val	Pro	Pro	Ser	Thr	Ala	Leu	Arg	Glu	Leu	Ile	Glu	Glu	Leu
1				5					10					15	
Val	Asn	Ile	Thr	Gln	Asn	Gln	Lys	Ala	Pro	Leu	Cys	Asn	Gly	Ser	Met
		20						25					30		
Val	Trp	Ser	Ile	Asn	Leu	Thr	Ala	Gly	Met	Tyr	Cys	Ala	Ala	Leu	Glu
		35					40					45			
Ser	Leu	Ile	Asn	Val	Ser	Gly	Cys	Ser	Ala	Ile	Glu	Lys	Thr	Gln	Arg
	50					55					60				
Met	Leu	Ser	Gly	Phe	Cys	Pro	His	Lys	Val	Ser	Ala	Gly	Gln	Phe	Ser
65					70					75					80
Ser	Leu	His	Val	Gln	Asp	Thr	Lys	Ile	Glu	Val	Ala	Gln	Phe	Val	Lys
			85					90					95		
Asp	Leu	Leu	Leu	His	Leu	Lys	Lys	Leu	Phe	Arg	Glu	Gly	Arg	Phe	Asn
			100					105					110		

<210> 618  
<211> 112  
<212> PRT  
<213> homo sapiens

<400> 618

Gly	Pro	Val	Pro	Pro	Ser	Thr	Ala	Leu	Arg	Glu	Leu	Ile	Glu	Glu	Leu
1				5					10					15	
Val	Asn	Ile	Thr	Gln	Asn	Gln	Lys	Ala	Pro	Leu	Cys	Asn	Gly	Ser	Met
		20						25					30		
Val	Trp	Ser	Ile	Asn	Leu	Thr	Ala	Gly	Met	Tyr	Cys	Ala	Ala	Leu	Glu
		35					40					45			
Ser	Leu	Ile	Asn	Val	Ser	Gly	Cys	Ser	Ala	Ile	Glu	Lys	Thr	Gln	Arg
	50					55					60				
Met	Leu	Ser	Gly	Phe	Cys	Pro	His	Lys	Val	Ser	Ala	Gly	Gln	Phe	Ser
65					70					75					80
Ser	Leu	His	Val	Arg	Gln	Thr	Lys	Ile	Glu	Val	Ala	Gln	Phe	Val	Lys
			85					90					95		
Asp	Leu	Leu	Leu	His	Leu	Lys	Lys	Leu	Phe	Arg	Glu	Gly	Arg	Phe	Asn
			100					105					110		

<210> 619  
<211> 112

<212> PRT  
<213> homo sapiens

<400> 619

Gly	Pro	Val	Pro	Pro	Ser	Thr	Ala	Leu	Arg	Glu	Leu	Ile	Glu	Glu	Leu
1				5					10					15	
Val	Asn	Ile	Thr	Gln	Asn	Gln	Lys	Ala	Pro	Leu	Cys	Asn	Gly	Ser	Met
			20					25					30		
Val	Trp	Ser	Ile	Asn	Leu	Thr	Ala	Gly	Met	Tyr	Cys	Ala	Ala	Leu	Glu
		35					40					45			
Ser	Leu	Ile	Asn	Val	Ser	Gly	Cys	Ser	Ala	Ile	Glu	Lys	Thr	Gln	Arg
	50					55					60				
Met	Leu	Ser	Gly	Phe	Cys	Pro	His	Lys	Val	Ser	Ala	Gly	Gln	Phe	Ser
65					70				75						80
Ser	Leu	His	Val	Arg	Asn	Thr	Lys	Ile	Glu	Val	Ala	Gln	Phe	Val	Lys
			85						90				95		
Asp	Leu	Leu	Leu	His	Leu	Lys	Lys	Leu	Phe	Arg	Glu	Gly	Arg	Phe	Asn
			100					105					110		

<210> 620  
<211> 112  
<212> PRT  
<213> homo sapiens

<400> 620

Gly	Pro	Val	Pro	Pro	Ser	Thr	Ala	Leu	Arg	Glu	Leu	Ile	Glu	Glu	Leu
1				5					10					15	
Val	Asn	Ile	Thr	Gln	Asn	Gln	Lys	Ala	Pro	Leu	Cys	Asn	Gly	Ser	Met
			20					25					30		
Val	Trp	Ser	Ile	Asn	Leu	Thr	Ala	Gly	Met	Tyr	Cys	Ala	Ala	Leu	Glu
		35					40					45			
Ser	Leu	Ile	Asn	Val	Ser	Gly	Cys	Ser	Ala	Ile	Glu	Lys	Thr	Gln	Arg
	50					55					60				
Met	Leu	Ser	Gly	Phe	Cys	Pro	His	Lys	Val	Ser	Ala	Gly	Gln	Phe	Ser
65					70				75						80
Ser	Leu	His	Val	Arg	Asp	Thr	Gln	Ile	Glu	Val	Ala	Gln	Phe	Val	Lys
			85						90				95		
Asp	Leu	Leu	Leu	His	Leu	Lys	Lys	Leu	Phe	Arg	Glu	Gly	Arg	Phe	Asn
			100					105					110		

<210> 621  
<211> 112  
<212> PRT  
<213> homo sapiens

<400> 621

Gly	Pro	Val	Pro	Pro	Ser	Thr	Ala	Leu	Arg	Glu	Leu	Ile	Glu	Glu	Leu
1				5					10					15	
Val	Asn	Ile	Thr	Gln	Asn	Gln	Lys	Ala	Pro	Leu	Cys	Asn	Gly	Ser	Met
			20					25					30		
Val	Trp	Ser	Ile	Asn	Leu	Thr	Ala	Gly	Met	Tyr	Cys	Ala	Ala	Leu	Glu
		35					40					45			
Ser	Leu	Ile	Asn	Val	Ser	Gly	Cys	Ser	Ala	Ile	Glu	Lys	Thr	Gln	Arg
	50					55					60				
Met	Leu	Ser	Gly	Phe	Cys	Pro	His	Lys	Val	Ser	Ala	Gly	Gln	Phe	Ser
65					70				75						80
Ser	Leu	His	Val	Arg	Asp	Thr	Asn	Ile	Glu	Val	Ala	Gln	Phe	Val	Lys
			85						90				95		
Asp	Leu	Leu	Leu	His	Leu	Lys	Lys	Leu	Phe	Arg	Glu	Gly	Arg	Phe	Asn
			100					105					110		

<210> 622  
<211> 112

<212> PRT  
<213> homo sapiens

<400> 622

Gly	Pro	Val	Pro	Pro	Ser	Thr	Ala	Leu	Arg	Glu	Leu	Ile	Glu	Glu	Leu
1				5					10					15	
Val	Asn	Ile	Thr	Gln	Asn	Gln	Lys	Ala	Pro	Leu	Cys	Asn	Gly	Ser	Met
			20					25					30		
Val	Trp	Ser	Ile	Asn	Leu	Thr	Ala	Gly	Met	Tyr	Cys	Ala	Ala	Leu	Glu
		35					40					45			
Ser	Leu	Ile	Asn	Val	Ser	Gly	Cys	Ser	Ala	Ile	Glu	Lys	Thr	Gln	Arg
	50					55					60				
Met	Leu	Ser	Gly	Phe	Cys	Pro	His	Lys	Val	Ser	Ala	Gly	Gln	Phe	Ser
65					70					75					80
Ser	Leu	His	Val	Arg	Asp	Thr	Lys	Ile	Glu	Val	Ala	Gln	Phe	Val	Lys
			85						90					95	
Asp	Leu	Leu	Leu	His	Leu	Lys	Lys	Leu	Phe	His	Glu	Gly	Arg	Phe	Asn
			100					105						110	

<210> 623  
<211> 112  
<212> PRT  
<213> homo sapiens

<400> 623

Gly	Pro	Val	Pro	Pro	Ser	Thr	Ala	Leu	Arg	Glu	Leu	Ile	Glu	Glu	Leu
1				5					10					15	
Val	Asn	Ile	Thr	Gln	Asn	Gln	Lys	Ala	Pro	Leu	Cys	Asn	Gly	Ser	Met
			20					25					30		
Val	Trp	Ser	Ile	Asn	Leu	Thr	Ala	Gly	Met	Tyr	Cys	Ala	Ala	Leu	Glu
		35					40					45			
Ser	Leu	Ile	Asn	Val	Ser	Gly	Cys	Ser	Ala	Ile	Glu	Lys	Thr	Gln	Arg
	50					55					60				
Met	Leu	Ser	Gly	Phe	Cys	Pro	His	Lys	Val	Ser	Ala	Gly	Gln	Phe	Ser
65					70					75					80
Ser	Leu	His	Val	Arg	Asp	Thr	Lys	Ile	Glu	Val	Ala	Gln	Phe	Val	Lys
			85						90					95	
Asp	Leu	Leu	Leu	His	Leu	Lys	Lys	Leu	Phe	Gln	Glu	Gly	Arg	Phe	Asn
			100					105						110	

<210> 624  
<211> 112  
<212> PRT  
<213> homo sapiens

<400> 624

Gly	Pro	Val	Pro	Pro	Ser	Thr	Ala	Leu	Arg	Glu	Leu	Ile	Glu	Glu	Leu
1				5					10					15	
Val	Asn	Ile	Thr	Gln	Asn	Gln	Lys	Ala	Pro	Leu	Cys	Asn	Gly	Ser	Met
			20					25					30		
Val	Trp	Ser	Ile	Asn	Leu	Thr	Ala	Gly	Met	Tyr	Cys	Ala	Ala	Leu	Glu
		35					40					45			
Ser	Leu	Ile	Asn	Val	Ser	Gly	Cys	Ser	Ala	Ile	Glu	Lys	Thr	Gln	Arg
	50					55					60				
Met	Leu	Ser	Gly	Phe	Cys	Pro	His	Lys	Val	Ser	Ala	Gly	Gln	Phe	Ser
65					70					75					80
Ser	Leu	His	Val	Arg	Asp	Thr	Lys	Ile	Glu	Val	Ala	Gln	Phe	Val	Lys
			85						90					95	
Asp	Leu	Leu	Leu	His	Leu	Lys	Lys	Leu	Phe	Arg	Gln	Gly	Arg	Phe	Asn
			100					105						110	

<210> 625  
<211> 112

<212> PRT  
<213> homo sapiens

<400> 625

Gly	Pro	Val	Pro	Pro	Ser	Thr	Ala	Leu	Arg	Glu	Leu	Ile	Glu	Glu	Leu
1				5					10					15	
Val	Asn	Ile	Thr	Gln	Asn	Gln	Lys	Ala	Pro	Leu	Cys	Asn	Gly	Ser	Met
			20					25					30		
Val	Trp	Ser	Ile	Asn	Leu	Thr	Ala	Gly	Met	Tyr	Cys	Ala	Ala	Leu	Glu
		35					40					45			
Ser	Leu	Ile	Asn	Val	Ser	Gly	Cys	Ser	Ala	Ile	Glu	Lys	Thr	Gln	Arg
	50					55					60				
Met	Leu	Ser	Gly	Phe	Cys	Pro	His	Lys	Val	Ser	Ala	Gly	Gln	Phe	Ser
65					70				75						80
Ser	Leu	His	Val	Arg	Asp	Thr	Lys	Ile	Glu	Val	Ala	Gln	Phe	Val	Lys
			85						90				95		
Asp	Leu	Leu	Leu	His	Leu	Lys	Lys	Leu	Phe	Arg	Asn	Gly	Arg	Phe	Asn
			100					105					110		

<210> 626  
<211> 112  
<212> PRT  
<213> homo sapiens

<400> 626

Gly	Pro	Val	Pro	Pro	Ser	Thr	Ala	Leu	Arg	Glu	Leu	Ile	Glu	Glu	Leu
1				5					10					15	
Val	Asn	Ile	Thr	Gln	Asn	Gln	Lys	Ala	Pro	Leu	Cys	Asn	Gly	Ser	Met
			20					25					30		
Val	Trp	Ser	Ile	Asn	Leu	Thr	Ala	Gly	Met	Tyr	Cys	Ala	Ala	Leu	Glu
		35					40					45			
Ser	Leu	Ile	Asn	Val	Ser	Gly	Cys	Ser	Ala	Ile	Glu	Lys	Thr	Gln	Arg
	50					55					60				
Met	Leu	Ser	Gly	Phe	Cys	Pro	His	Lys	Val	Ser	Ala	Gly	Gln	Phe	Ser
65					70				75						80
Ser	Leu	His	Val	Arg	Asp	Thr	Lys	Ile	Glu	Val	Ala	Gln	Phe	Val	Lys
			85						90				95		
Asp	Leu	Leu	Leu	His	Leu	Lys	Lys	Leu	Phe	Arg	His	Gly	Arg	Phe	Asn
			100					105					110		

<210> 627  
<211> 112  
<212> PRT  
<213> homo sapiens

<400> 627

Gly	Pro	Val	Pro	Pro	Ser	Thr	Ala	Leu	Arg	Glu	Leu	Ile	Glu	Glu	Leu
1				5					10					15	
Val	Asn	Ile	Thr	Gln	Asn	Gln	Lys	Ala	Pro	Leu	Cys	Asn	Gly	Ser	Met
			20					25					30		
Val	Trp	Ser	Ile	Asn	Leu	Thr	Ala	Gly	Met	Tyr	Cys	Ala	Ala	Leu	Glu
		35					40					45			
Ser	Leu	Ile	Asn	Val	Ser	Gly	Cys	Ser	Ala	Ile	Glu	Lys	Thr	Gln	Arg
	50					55					60				
Met	Leu	Ser	Gly	Phe	Cys	Pro	His	Lys	Val	Ser	Ala	Gly	Gln	Phe	Ser
65					70				75						80
Ser	Leu	His	Val	Arg	Asp	Thr	Lys	Ile	Glu	Val	Ala	Gln	Phe	Val	Lys
			85						90				95		
Asp	Leu	Leu	Leu	His	Leu	Lys	Lys	Leu	Phe	Arg	Glu	Gly	His	Phe	Asn
			100					105					110		

<210> 628  
<211> 112

<212> PRT  
<213> homo sapiens

<400> 628

Gly	Pro	Val	Pro	Pro	Ser	Thr	Ala	Leu	Arg	Glu	Leu	Ile	Glu	Glu	Leu
1				5					10					15	
Val	Asn	Ile	Thr	Gln	Asn	Gln	Lys	Ala	Pro	Leu	Cys	Asn	Gly	Ser	Met
		20					25						30		
Val	Trp	Ser	Ile	Asn	Leu	Thr	Ala	Gly	Met	Tyr	Cys	Ala	Ala	Leu	Glu
		35					40					45			
Ser	Leu	Ile	Asn	Val	Ser	Gly	Cys	Ser	Ala	Ile	Glu	Lys	Thr	Gln	Arg
	50					55					60				
Met	Leu	Ser	Gly	Phe	Cys	Pro	His	Lys	Val	Ser	Ala	Gly	Gln	Phe	Ser
65				70						75				80	
Ser	Leu	His	Val	Arg	Asp	Thr	Lys	Ile	Glu	Val	Ala	Gln	Phe	Val	Lys
			85						90				95		
Asp	Leu	Leu	Leu	His	Leu	Lys	Lys	Leu	Phe	Arg	Glu	Gly	Gln	Phe	Asn
			100					105						110	

<210> 629

<211> 112

<212> PRT

<213> homo sapiens

<400> 629

Gly	Pro	Val	Pro	Pro	Ser	Thr	Ala	Leu	Arg	Glu	Leu	Ile	Glu	Glu	Leu
1				5					10					15	
Val	Asn	Ile	Thr	Gln	Asn	Gln	Lys	Ala	Pro	Leu	Cys	Asn	Gly	Ser	Met
		20					25						30		
Val	Trp	Ser	Ile	Asn	Leu	Thr	Ala	Gly	Met	Tyr	Cys	Ala	Ala	Leu	Glu
		35					40					45			
Ser	Leu	Ile	Asn	Val	Ser	Gly	Cys	Ser	Ala	Ile	Glu	Lys	Thr	Gln	Arg
	50					55					60				
Met	Leu	Ser	Gly	Phe	Cys	Pro	His	Lys	Val	Ser	Ala	Gly	Gln	Phe	Ser
65				70						75				80	
Ser	Leu	His	Val	Arg	Asp	Thr	Lys	Ile	Glu	Val	Ala	Gln	Phe	Val	Lys
			85						90				95		
Asp	Leu	Leu	Leu	His	Leu	Lys	Lys	Leu	Phe	Arg	Glu	Gly	Arg	Ile	Asn
			100					105						110	

<210> 630

<211> 112

<212> PRT

<213> homo sapiens

<400> 630

Gly	Pro	Val	Pro	Pro	Ser	Thr	Ala	Leu	Arg	Glu	Leu	Ile	Glu	Glu	Leu
1				5					10					15	
Val	Asn	Ile	Thr	Gln	Asn	Gln	Lys	Ala	Pro	Leu	Cys	Asn	Gly	Ser	Met
		20					25						30		
Val	Trp	Ser	Ile	Asn	Leu	Thr	Ala	Gly	Met	Tyr	Cys	Ala	Ala	Leu	Glu
		35					40					45			
Ser	Leu	Ile	Asn	Val	Ser	Gly	Cys	Ser	Ala	Ile	Glu	Lys	Thr	Gln	Arg
	50					55					60				
Met	Leu	Ser	Gly	Phe	Cys	Pro	His	Lys	Val	Ser	Ala	Gly	Gln	Phe	Ser
65				70						75				80	
Ser	Leu	His	Val	Arg	Asp	Thr	Lys	Ile	Glu	Val	Ala	Gln	Phe	Val	Lys
			85						90				95		
Asp	Leu	Leu	Leu	His	Leu	Lys	Lys	Leu	Phe	Arg	Glu	Gly	Arg	Val	Asn
			100					105						110	

<210> 631

<211> 177

<212> PRT  
 <213> homo sapiens

<400> 631

Thr	Pro	Leu	Gly	Pro	Ala	Ser	Ser	Leu	Pro	Gln	Ser	Phe	Leu	Leu	Lys
1				5					10					15	
Cys	Leu	Glu	Gln	Val	Arg	Lys	Ile	Gln	Gly	Asp	Gly	Ala	Ala	Leu	Gln
			20					25					30		
Glu	Lys	Leu	Val	Ser	Glu	Cys	Ala	Thr	Tyr	Lys	Leu	Cys	His	Pro	Glu
		35					40					45			
Glu	Leu	Val	Leu	Leu	Gly	His	Ser	Leu	Gly	Ile	Pro	Ser	Ala	Pro	Leu
		50				55					60				
Ser	Ser	Cys	Pro	Ser	Gln	Ala	Leu	Gln	Leu	Ala	Gly	Cys	Leu	Ser	Gln
65					70					75					80
Leu	His	Ser	Gly	Leu	Phe	Leu	Tyr	Gln	Gly	Leu	Leu	Gln	Ala	Leu	Glu
				85					90					95	
Gly	Ile	Ser	Pro	Glu	Leu	Gly	Pro	Thr	Leu	Asp	Thr	Leu	Gln	Leu	Asp
			100					105					110		
Val	Ala	Asp	Phe	Ala	Thr	Thr	Ile	Trp	Gln	Gln	Met	Glu	Glu	Leu	Gly
		115					120					125			
Met	Ala	Pro	Ala	Leu	Gln	Pro	Thr	Gln	Gly	Ala	Met	Pro	Ala	Phe	Ala
		130				135					140				
Ser	Ala	Phe	Gln	Arg	Arg	Ala	Gly	Gly	Val	Leu	Val	Ala	Ser	His	Leu
145					150					155					160
Gln	Ser	Phe	Leu	Glu	Val	Ser	Tyr	Arg	Val	Leu	Arg	His	Leu	Ala	Gln
				165					170					175	

Pro

<210> 632  
 <211> 177  
 <212> PRT  
 <213> homo sapiens

<400> 632

Thr	Pro	Leu	Gly	Pro	Ala	Ser	Ser	Leu	Pro	Gln	Ser	Phe	Leu	Leu	Lys
1				5					10					15	
Cys	Leu	Glu	Gln	Val	Arg	Lys	Ile	Gln	Gly	Asp	Gly	Ala	Ala	Leu	Gln
			20					25					30		
Glu	Lys	Leu	Val	Ser	Glu	Cys	Ala	Thr	Tyr	Lys	Leu	Cys	His	Pro	Glu
		35					40					45			
Glu	Leu	Val	Leu	Leu	Gly	His	Ser	Leu	Gly	Ile	Pro	His	Ala	Pro	Leu
		50				55					60				
Ser	Ser	Cys	Pro	Ser	Gln	Ala	Leu	Gln	Leu	Ala	Gly	Cys	Leu	Ser	Gln
65					70					75					80
Leu	His	Ser	Gly	Leu	Phe	Leu	Tyr	Gln	Gly	Leu	Leu	Gln	Ala	Leu	Glu
				85					90					95	
Gly	Ile	Ser	Pro	Glu	Leu	Gly	Pro	Thr	Leu	Asp	Thr	Leu	Gln	Leu	Asp
			100					105					110		
Val	Ala	Asp	Phe	Ala	Thr	Thr	Ile	Trp	Gln	Gln	Met	Glu	Glu	Leu	Gly
		115					120					125			
Met	Ala	Pro	Ala	Leu	Gln	Pro	Thr	Gln	Gly	Ala	Met	Pro	Ala	Phe	Ala
		130				135					140				
Ser	Ala	Phe	Gln	Arg	Arg	Ala	Gly	Gly	Val	Leu	Val	Ala	Ser	His	Leu
145					150					155					160
Gln	Ser	Phe	Leu	Glu	Val	Ser	Tyr	Arg	Val	Leu	Arg	His	Leu	Ala	Gln
				165					170					175	

Pro

<210> 633  
 <211> 177  
 <212> PRT

<213> homo sapiens

<400> 633

```
Thr Pro Leu Gly Pro Ala Ser Ser Leu Pro Gln Ser Phe Leu Leu Lys
 1          5          10          15
Cys Leu Glu Gln Val Arg Lys Ile Gln Gly Asp Gly Ala Ala Leu Gln
      20          25          30
Glu Lys Leu Val Ser Glu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu
      35          40          45
Glu Leu Val Leu Leu Gly His Ser Leu Gly Ile Pro Trp Ala Ser Leu
      50          55          60
Ser Ser Cys Pro Ser Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln
      65          70          75          80
Leu His Ser Gly Leu Phe Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu
      85          90          95
Gly Ile Ser Pro Glu Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp
      100          105          110
Val Ala Asp Phe Ala Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly
      115          120          125
Met Ala Pro Ala Leu Gln Pro Thr Gln Gly Ala Met Pro Ala Phe Ala
      130          135          140
Ser Ala Phe Gln Arg Arg Ala Gly Gly Val Leu Val Ala Ser His Leu
      145          150          155          160
Gln Ser Phe Leu Glu Val Ser Tyr Arg Val Leu Arg His Leu Ala Gln
      165          170          175
Pro
```

<210> 634

<211> 177

<212> PRT

<213> homo sapiens

<400> 634

```
Thr Pro Leu Gly Pro Ala Ser Ser Leu Pro Gln Ser Phe Leu Leu Lys
 1          5          10          15
Cys Leu Glu Gln Val Arg Lys Ile Gln Gly Asp Gly Ala Ala Leu Gln
      20          25          30
Glu Lys Leu Val Ser Glu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu
      35          40          45
Glu Leu Val Leu Leu Gly His Ser Leu Gly Ile Pro Trp Ala Ala Leu
      50          55          60
Ser Ser Cys Pro Ser Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln
      65          70          75          80
Leu His Ser Gly Leu Phe Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu
      85          90          95
Gly Ile Ser Pro Glu Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp
      100          105          110
Val Ala Asp Phe Ala Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly
      115          120          125
Met Ala Pro Ala Leu Gln Pro Thr Gln Gly Ala Met Pro Ala Phe Ala
      130          135          140
Ser Ala Phe Gln Arg Arg Ala Gly Gly Val Leu Val Ala Ser His Leu
      145          150          155          160
Gln Ser Phe Leu Glu Val Ser Tyr Arg Val Leu Arg His Leu Ala Gln
      165          170          175
Pro
```

<210> 635

<211> 177

<212> PRT

<213> homo sapiens



<400> 635

Thr	Pro	Leu	Gly	Pro	Ala	Ser	Ser	Leu	Pro	Gln	Ser	Phe	Leu	Leu	Lys
1				5					10					15	
Cys	Leu	Glu	Gln	Val	Arg	Lys	Ile	Gln	Gly	Asp	Gly	Ala	Ala	Leu	Gln
		20						25					30		
Glu	Lys	Leu	Val	Ser	Glu	Cys	Ala	Thr	Tyr	Lys	Leu	Cys	His	Pro	Glu
	35					40						45			
Glu	Leu	Val	Leu	Leu	Gly	His	Ser	Leu	Gly	Ile	Pro	Trp	Ala	Pro	Leu
	50				55						60				
Ser	Ser	Cys	Ser	Ser	Gln	Ala	Leu	Gln	Leu	Ala	Gly	Cys	Leu	Ser	Gln
65					70					75					80
Leu	His	Ser	Gly	Leu	Phe	Leu	Tyr	Gln	Gly	Leu	Leu	Gln	Ala	Leu	Glu
			85						90					95	
Gly	Ile	Ser	Pro	Glu	Leu	Gly	Pro	Thr	Leu	Asp	Thr	Leu	Gln	Leu	Asp
			100					105					110		
Val	Ala	Asp	Phe	Ala	Thr	Thr	Ile	Trp	Gln	Gln	Met	Glu	Glu	Leu	Gly
	115						120					125			
Met	Ala	Pro	Ala	Leu	Gln	Pro	Thr	Gln	Gly	Ala	Met	Pro	Ala	Phe	Ala
	130					135					140				
Ser	Ala	Phe	Gln	Arg	Arg	Ala	Gly	Gly	Val	Leu	Val	Ala	Ser	His	Leu
145				150						155					160
Gln	Ser	Phe	Leu	Glu	Val	Ser	Tyr	Arg	Val	Leu	Arg	His	Leu	Ala	Gln
				165					170					175	

Pro

<210> 636

<211> 177

<212> PRT

<213> homo sapiens

<400> 636

Thr	Pro	Leu	Gly	Pro	Ala	Ser	Ser	Leu	Pro	Gln	Ser	Phe	Leu	Leu	Lys
1				5					10					15	
Cys	Leu	Glu	Gln	Val	Arg	Lys	Ile	Gln	Gly	Asp	Gly	Ala	Ala	Leu	Gln
		20						25					30		
Glu	Lys	Leu	Val	Ser	Glu	Cys	Ala	Thr	Tyr	Lys	Leu	Cys	His	Pro	Glu
	35					40						45			
Glu	Leu	Val	Leu	Leu	Gly	His	Ser	Leu	Gly	Ile	Pro	Trp	Ala	Pro	Leu
	50				55						60				
Ser	Ser	Cys	Ala	Ser	Gln	Ala	Leu	Gln	Leu	Ala	Gly	Cys	Leu	Ser	Gln
65					70					75					80
Leu	His	Ser	Gly	Leu	Phe	Leu	Tyr	Gln	Gly	Leu	Leu	Gln	Ala	Leu	Glu
			85						90					95	
Gly	Ile	Ser	Pro	Glu	Leu	Gly	Pro	Thr	Leu	Asp	Thr	Leu	Gln	Leu	Asp
			100					105					110		
Val	Ala	Asp	Phe	Ala	Thr	Thr	Ile	Trp	Gln	Gln	Met	Glu	Glu	Leu	Gly
	115						120					125			
Met	Ala	Pro	Ala	Leu	Gln	Pro	Thr	Gln	Gly	Ala	Met	Pro	Ala	Phe	Ala
	130					135					140				
Ser	Ala	Phe	Gln	Arg	Arg	Ala	Gly	Gly	Val	Leu	Val	Ala	Ser	His	Leu
145				150						155					160
Gln	Ser	Phe	Leu	Glu	Val	Ser	Tyr	Arg	Val	Leu	Arg	His	Leu	Ala	Gln
				165					170					175	

Pro

<210> 637

<211> 177

<212> PRT

<213> homo sapiens

<400> 637

Thr	Pro	Leu	Gly	Pro	Ala	Ser	Ser	Leu	Pro	Gln	Ser	Phe	Leu	Leu	Lys
1				5					10					15	
Cys	Leu	Glu	Gln	Val	Arg	Lys	Ile	Gln	Gly	Asp	Gly	Ala	Ala	Leu	Gln
		20						25					30		
Glu	Lys	Leu	Val	Ser	Glu	Cys	Ala	Thr	Tyr	Lys	Leu	Cys	His	Pro	Glu
	35						40					45			
Glu	Leu	Val	Leu	Leu	Gly	His	Ser	Leu	Gly	Ile	Pro	Trp	Ala	Pro	Leu
	50					55					60				
Ser	Ser	Cys	Pro	Ser	Gln	Ala	Val	Gln	Leu	Ala	Gly	Cys	Leu	Ser	Gln
65					70					75					80
Leu	His	Ser	Gly	Leu	Phe	Leu	Tyr	Gln	Gly	Leu	Leu	Gln	Ala	Leu	Glu
			85						90					95	
Gly	Ile	Ser	Pro	Glu	Leu	Gly	Pro	Thr	Leu	Asp	Thr	Leu	Gln	Leu	Asp
		100						105					110		
Val	Ala	Asp	Phe	Ala	Thr	Thr	Ile	Trp	Gln	Gln	Met	Glu	Glu	Leu	Gly
	115						120					125			
Met	Ala	Pro	Ala	Leu	Gln	Pro	Thr	Gln	Gly	Ala	Met	Pro	Ala	Phe	Ala
	130					135					140				
Ser	Ala	Phe	Gln	Arg	Arg	Ala	Gly	Gly	Val	Leu	Val	Ala	Ser	His	Leu
145				150						155					160
Gln	Ser	Phe	Leu	Glu	Val	Ser	Tyr	Arg	Val	Leu	Arg	His	Leu	Ala	Gln
			165					170						175	

Pro

<210> 638

<211> 177

<212> PRT

<213> homo sapiens

<400> 638

Thr	Pro	Leu	Gly	Pro	Ala	Ser	Ser	Leu	Pro	Gln	Ser	Phe	Leu	Leu	Lys
1				5					10					15	
Cys	Leu	Glu	Gln	Val	Arg	Lys	Ile	Gln	Gly	Asp	Gly	Ala	Ala	Leu	Gln
		20						25					30		
Glu	Lys	Leu	Val	Ser	Glu	Cys	Ala	Thr	Tyr	Lys	Leu	Cys	His	Pro	Glu
	35						40					45			
Glu	Leu	Val	Leu	Leu	Gly	His	Ser	Leu	Gly	Ile	Pro	Trp	Ala	Pro	Leu
	50					55					60				
Ser	Ser	Cys	Pro	Ser	Gln	Ala	Ile	Gln	Leu	Ala	Gly	Cys	Leu	Ser	Gln
65					70					75					80
Leu	His	Ser	Gly	Leu	Phe	Leu	Tyr	Gln	Gly	Leu	Leu	Gln	Ala	Leu	Glu
			85						90					95	
Gly	Ile	Ser	Pro	Glu	Leu	Gly	Pro	Thr	Leu	Asp	Thr	Leu	Gln	Leu	Asp
		100						105					110		
Val	Ala	Asp	Phe	Ala	Thr	Thr	Ile	Trp	Gln	Gln	Met	Glu	Glu	Leu	Gly
	115						120					125			
Met	Ala	Pro	Ala	Leu	Gln	Pro	Thr	Gln	Gly	Ala	Met	Pro	Ala	Phe	Ala
	130					135					140				
Ser	Ala	Phe	Gln	Arg	Arg	Ala	Gly	Gly	Val	Leu	Val	Ala	Ser	His	Leu
145				150						155					160
Gln	Ser	Phe	Leu	Glu	Val	Ser	Tyr	Arg	Val	Leu	Arg	His	Leu	Ala	Gln
			165					170						175	

Pro

<210> 639

<211> 177

<212> PRT

<213> homo sapiens

<400> 639

Thr Pro Leu Gly Pro Ser Ser Leu Pro Gln Ser Phe Leu Lys  
 1 5 10 15  
 Cys Leu Glu Gln Val Arg Lys Ile Gln Gly Asp Gly Ala Ala Leu Gln  
 20 25 30  
 Glu Lys Leu Val Ser Glu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu  
 35 40 45  
 Glu Leu Val Leu Leu Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu  
 50 55 60  
 Ser Ser Cys Pro Ser Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln  
 65 70 75 80  
 Leu His Ser Gly Leu Ile Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu  
 85 90 95  
 Gly Ile Ser Pro Glu Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp  
 100 105 110  
 Val Ala Asp Phe Ala Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly  
 115 120 125  
 Met Ala Pro Ala Leu Gln Pro Thr Gln Gly Ala Met Pro Ala Phe Ala  
 130 135 140  
 Ser Ala Phe Gln Arg Arg Ala Gly Gly Val Leu Val Ala Ser His Leu  
 145 150 155 160  
 Gln Ser Phe Leu Glu Val Ser Tyr Arg Val Leu Arg His Leu Ala Gln  
 165 170 175  
 Pro

<210> 640  
 <211> 177  
 <212> PRT  
 <213> homo sapiens

<400> 640  
 Thr Pro Leu Gly Pro Ala Ser Ser Leu Pro Gln Ser Phe Leu Leu Lys  
 1 5 10 15  
 Cys Leu Glu Gln Val Arg Lys Ile Gln Gly Asp Gly Ala Ala Leu Gln  
 20 25 30  
 Glu Lys Leu Val Ser Glu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu  
 35 40 45  
 Glu Leu Val Leu Leu Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu  
 50 55 60  
 Ser Ser Cys Pro Ser Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln  
 65 70 75 80  
 Leu His Ser Gly Leu Val Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu  
 85 90 95  
 Gly Ile Ser Pro Glu Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp  
 100 105 110  
 Val Ala Asp Phe Ala Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly  
 115 120 125  
 Met Ala Pro Ala Leu Gln Pro Thr Gln Gly Ala Met Pro Ala Phe Ala  
 130 135 140  
 Ser Ala Phe Gln Arg Arg Ala Gly Gly Val Leu Val Ala Ser His Leu  
 145 150 155 160  
 Gln Ser Phe Leu Glu Val Ser Tyr Arg Val Leu Arg His Leu Ala Gln  
 165 170 175  
 Pro

<210> 641  
 <211> 177  
 <212> PRT  
 <213> homo sapiens

<400> 641  
 Thr Pro Leu Gly Pro Ala Ser Ser Leu Pro Gln Ser Phe Leu Leu Lys

1	5	10																	
Cys	Leu	Glu	Gln	Val	Arg	Lys	Ile	Gln	Gly	Asp	Gly	Ala	Ala	Leu	Gln				
		20						25					30						
Glu	Lys	Leu	Val	Ser	Glu	Cys	Ala	Thr	Tyr	Lys	Leu	Cys	His	Pro	Glu				
		35					40					45							
Glu	Leu	Val	Leu	Leu	Gly	His	Ser	Leu	Gly	Ile	Pro	Trp	Ala	Pro	Leu				
		50				55					60								
Ser	Ser	Cys	Pro	Ser	Gln	Ala	Leu	Gln	Leu	Ala	Gly	Cys	Leu	Ser	Gln				
		65			70				75						80				
Leu	His	Ser	Gly	Leu	Phe	Leu	Tyr	Gln	Gly	Leu	Leu	Gln	Ala	Leu	Gln				
			85					90						95					
Gly	Ile	Ser	Pro	Glu	Leu	Gly	Pro	Thr	Leu	Asp	Thr	Leu	Gln	Leu	Asp				
			100					105					110						
Val	Ala	Asp	Phe	Ala	Thr	Thr	Ile	Trp	Gln	Gln	Met	Glu	Glu	Leu	Gly				
		115					120					125							
Met	Ala	Pro	Ala	Leu	Gln	Pro	Thr	Gln	Gly	Ala	Met	Pro	Ala	Phe	Ala				
		130				135					140								
Ser	Ala	Phe	Gln	Arg	Arg	Ala	Gly	Gly	Val	Leu	Val	Ala	Ser	His	Leu				
		145			150				155						160				
Gln	Ser	Phe	Leu	Glu	Val	Ser	Tyr	Arg	Val	Leu	Arg	His	Leu	Ala	Gln				
			165					170						175					

Pro

<210> 642  
 <211> 177  
 <212> PRT  
 <213> homo sapiens

<400> 642																			
Thr	Pro	Leu	Gly	Pro	Ala	Ser	Ser	Leu	Pro	Gln	Ser	Phe	Leu	Leu	Lys				
1				5					10				15						
Cys	Leu	Glu	Gln	Val	Arg	Lys	Ile	Gln	Gly	Asp	Gly	Ala	Ala	Leu	Gln				
		20						25				30							
Glu	Lys	Leu	Val	Ser	Glu	Cys	Ala	Thr	Tyr	Lys	Leu	Cys	His	Pro	Glu				
		35					40				45								
Glu	Leu	Val	Leu	Leu	Gly	His	Ser	Leu	Gly	Ile	Pro	Trp	Ala	Pro	Leu				
		50				55					60								
Ser	Ser	Cys	Pro	Ser	Gln	Ala	Leu	Gln	Leu	Ala	Gly	Cys	Leu	Ser	Gln				
		65			70				75						80				
Leu	His	Ser	Gly	Leu	Phe	Leu	Tyr	Gln	Gly	Leu	Leu	Gln	Ala	Leu	Asn				
			85					90						95					
Gly	Ile	Ser	Pro	Glu	Leu	Gly	Pro	Thr	Leu	Asp	Thr	Leu	Gln	Leu	Asp				
			100					105					110						
Val	Ala	Asp	Phe	Ala	Thr	Thr	Ile	Trp	Gln	Gln	Met	Glu	Glu	Leu	Gly				
		115					120					125							
Met	Ala	Pro	Ala	Leu	Gln	Pro	Thr	Gln	Gly	Ala	Met	Pro	Ala	Phe	Ala				
		130				135					140								
Ser	Ala	Phe	Gln	Arg	Arg	Ala	Gly	Gly	Val	Leu	Val	Ala	Ser	His	Leu				
		145			150				155						160				
Gln	Ser	Phe	Leu	Glu	Val	Ser	Tyr	Arg	Val	Leu	Arg	His	Leu	Ala	Gln				
			165					170						175					

Pro

<210> 643  
 <211> 177  
 <212> PRT  
 <213> homo sapiens

<400> 643																			
Thr	Pro	Leu	Gly	Pro	Ala	Ser	Ser	Leu	Pro	Gln	Ser	Phe	Leu	Leu	Lys				
1					5				10					15					

Cys Leu Glu Gln Val Lys Ile Gln Gly Asp Gly Ala Ala Gln  
 20 25 30  
 Glu Lys Leu Val Ser Glu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu  
 35 40 45  
 Glu Leu Val Leu Leu Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu  
 50 55 60  
 Ser Ser Cys Pro Ser Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln  
 65 70 75 80  
 Leu His Ser Gly Leu Phe Leu Tyr Gln Gly Leu Leu Gln Ala Leu His  
 85 90 95  
 Gly Ile Ser Pro Glu Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp  
 100 105 110  
 Val Ala Asp Phe Ala Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly  
 115 120 125  
 Met Ala Pro Ala Leu Gln Pro Thr Gln Gly Ala Met Pro Ala Phe Ala  
 130 135 140  
 Ser Ala Phe Gln Arg Arg Ala Gly Gly Val Leu Val Ala Ser His Leu  
 145 150 155 160  
 Gln Ser Phe Leu Glu Val Ser Tyr Arg Val Leu Arg His Leu Ala Gln  
 165 170 175  
 Pro

<210> 644  
 <211> 177  
 <212> PRT  
 <213> homo sapiens

<400> 644  
 Thr Pro Leu Gly Pro Ala Ser Ser Leu Pro Gln Ser Phe Leu Leu Lys  
 1 5 10 15  
 Cys Leu Glu Gln Val Arg Lys Ile Gln Gly Asp Gly Ala Ala Leu Gln  
 20 25 30  
 Glu Lys Leu Val Ser Glu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu  
 35 40 45  
 Glu Leu Val Leu Leu Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu  
 50 55 60  
 Ser Ser Cys Pro Ser Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln  
 65 70 75 80  
 Leu His Ser Gly Leu Phe Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu  
 85 90 95  
 Gly Ile Ser Ser Glu Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp  
 100 105 110  
 Val Ala Asp Phe Ala Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly  
 115 120 125  
 Met Ala Pro Ala Leu Gln Pro Thr Gln Gly Ala Met Pro Ala Phe Ala  
 130 135 140  
 Ser Ala Phe Gln Arg Arg Ala Gly Gly Val Leu Val Ala Ser His Leu  
 145 150 155 160  
 Gln Ser Phe Leu Glu Val Ser Tyr Arg Val Leu Arg His Leu Ala Gln  
 165 170 175  
 Pro

<210> 645  
 <211> 177  
 <212> PRT  
 <213> homo sapiens

<400> 645  
 Thr Pro Leu Gly Pro Ala Ser Ser Leu Pro Gln Ser Phe Leu Leu Lys  
 1 5 10 15  
 Cys Leu Glu Gln Val Arg Lys Ile Gln Gly Asp Gly Ala Ala Leu Gln



Glu Lys Leu Val Ser Cys Ala Thr Tyr Lys Leu Cys His Glu  
 35 40 45  
 Glu Leu Val Leu Leu Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu  
 50 55 60  
 Ser Ser Cys Pro Ser Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln  
 65 70 75 80  
 Leu His Ser Gly Leu Phe Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu  
 85 90 95  
 Gly Ile Ser Pro Asn Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp  
 100 105 110  
 Val Ala Asp Phe Ala Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly  
 115 120 125  
 Met Ala Pro Ala Leu Gln Pro Thr Gln Gly Ala Met Pro Ala Phe Ala  
 130 135 140  
 Ser Ala Phe Gln Arg Arg Ala Gly Gly Val Leu Val Ala Ser His Leu  
 145 150 155 160  
 Gln Ser Phe Leu Glu Val Ser Tyr Arg Val Leu Arg His Leu Ala Gln  
 165 170 175  
 Pro

<210> 648  
 <211> 177  
 <212> PRT  
 <213> homo sapiens

<400> 648  
 Thr Pro Leu Gly Pro Ala Ser Ser Leu Pro Gln Ser Phe Leu Leu Lys  
 1 5 10 15  
 Cys Leu Glu Gln Val Arg Lys Ile Gln Gly Asp Gly Ala Ala Leu Gln  
 20 25 30  
 Glu Lys Leu Val Ser Glu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu  
 35 40 45  
 Glu Leu Val Leu Leu Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu  
 50 55 60  
 Ser Ser Cys Pro Ser Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln  
 65 70 75 80  
 Leu His Ser Gly Leu Phe Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu  
 85 90 95  
 Gly Ile Ser Pro His Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp  
 100 105 110  
 Val Ala Asp Phe Ala Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly  
 115 120 125  
 Met Ala Pro Ala Leu Gln Pro Thr Gln Gly Ala Met Pro Ala Phe Ala  
 130 135 140  
 Ser Ala Phe Gln Arg Arg Ala Gly Gly Val Leu Val Ala Ser His Leu  
 145 150 155 160  
 Gln Ser Phe Leu Glu Val Ser Tyr Arg Val Leu Arg His Leu Ala Gln  
 165 170 175  
 Pro

<210> 649  
 <211> 177  
 <212> PRT  
 <213> homo sapiens

<400> 649  
 Thr Pro Leu Gly Pro Ala Ser Ser Leu Pro Gln Ser Phe Leu Leu Lys  
 1 5 10 15  
 Cys Leu Glu Gln Val Arg Lys Ile Gln Gly Asp Gly Ala Ala Leu Gln  
 20 25 30  
 Glu Lys Leu Val Ser Glu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu

35 40 45  
 Glu Leu Val Leu Leu Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu  
 50 55 60  
 Ser Ser Cys Pro Ser Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln  
 65 70 75 80  
 Leu His Ser Gly Leu Phe Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu  
 85 90 95  
 Gly Ile Ser Pro Glu Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp  
 100 105 110  
 Val Ala Asp Phe Ala Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly  
 115 120 125  
 Met Ala Ser Ala Leu Gln Pro Thr Gln Gly Ala Met Pro Ala Phe Ala  
 130 135 140  
 Ser Ala Phe Gln Arg Arg Ala Gly Gly Val Leu Val Ala Ser His Leu  
 145 150 155 160  
 Gln Ser Phe Leu Glu Val Ser Tyr Arg Val Leu Arg His Leu Ala Gln  
 165 170 175  
 Pro

<210> 650  
 <211> 177  
 <212> PRT  
 <213> homo sapiens

<400> 650  
 Thr Pro Leu Gly Pro Ala Ser Ser Leu Pro Gln Ser Phe Leu Leu Lys  
 1 5 10 15  
 Cys Leu Glu Gln Val Arg Lys Ile Gln Gly Asp Gly Ala Ala Leu Gln  
 20 25 30  
 Glu Lys Leu Val Ser Glu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu  
 35 40 45  
 Glu Leu Val Leu Leu Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu  
 50 55 60  
 Ser Ser Cys Pro Ser Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln  
 65 70 75 80  
 Leu His Ser Gly Leu Phe Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu  
 85 90 95  
 Gly Ile Ser Pro Glu Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp  
 100 105 110  
 Val Ala Asp Phe Ala Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly  
 115 120 125  
 Met Ala Ala Ala Leu Gln Pro Thr Gln Gly Ala Met Pro Ala Phe Ala  
 130 135 140  
 Ser Ala Phe Gln Arg Arg Ala Gly Gly Val Leu Val Ala Ser His Leu  
 145 150 155 160  
 Gln Ser Phe Leu Glu Val Ser Tyr Arg Val Leu Arg His Leu Ala Gln  
 165 170 175  
 Pro

<210> 651  
 <211> 177  
 <212> PRT  
 <213> homo sapiens

<400> 651  
 Thr Pro Leu Gly Pro Ala Ser Ser Leu Pro Gln Ser Phe Leu Leu Lys  
 1 5 10 15  
 Cys Leu Glu Gln Val Arg Lys Ile Gln Gly Asp Gly Ala Ala Leu Gln  
 20 25 30  
 Glu Lys Leu Val Ser Glu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu  
 35 40 45



Glu Leu Val Leu Leu His Ser Leu Gly Ile Pro Trp Ala Leu  
 50 55 60  
 Ser Ser Cys Pro Ser Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln  
 65 70 75 80  
 Leu His Ser Gly Leu Phe Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu  
 85 90 95  
 Gly Ile Ser Pro Glu Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp  
 100 105 110  
 Val Ala Asp Phe Ala Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly  
 115 120 125  
 Met Ala Pro Ala Val Gln Pro Thr Gln Gly Ala Met Pro Ala Phe Ala  
 130 135 140  
 Ser Ala Phe Gln Arg Arg Ala Gly Gly Val Leu Val Ala Ser His Leu  
 145 150 155 160  
 Gln Ser Phe Leu Glu Val Ser Tyr Arg Val Leu Arg His Leu Ala Gln  
 165 170 175  
 Pro

<210> 652  
 <211> 177  
 <212> PRT  
 <213> homo sapiens

<400> 652  
 Thr Pro Leu Gly Pro Ala Ser Ser Leu Pro Gln Ser Phe Leu Leu Lys  
 1 5 10 15  
 Cys Leu Glu Gln Val Arg Lys Ile Gln Gly Asp Gly Ala Ala Leu Gln  
 20 25 30  
 Glu Lys Leu Val Ser Glu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu  
 35 40 45  
 Glu Leu Val Leu Leu Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu  
 50 55 60  
 Ser Ser Cys Pro Ser Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln  
 65 70 75 80  
 Leu His Ser Gly Leu Phe Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu  
 85 90 95  
 Gly Ile Ser Pro Glu Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp  
 100 105 110  
 Val Ala Asp Phe Ala Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly  
 115 120 125  
 Met Ala Pro Ala Ile Gln Pro Thr Gln Gly Ala Met Pro Ala Phe Ala  
 130 135 140  
 Ser Ala Phe Gln Arg Arg Ala Gly Gly Val Leu Val Ala Ser His Leu  
 145 150 155 160  
 Gln Ser Phe Leu Glu Val Ser Tyr Arg Val Leu Arg His Leu Ala Gln  
 165 170 175  
 Pro

<210> 653  
 <211> 177  
 <212> PRT  
 <213> homo sapiens

<400> 653  
 Thr Pro Leu Gly Pro Ala Ser Ser Leu Pro Gln Ser Phe Leu Leu Lys  
 1 5 10 15  
 Cys Leu Glu Gln Val Arg Lys Ile Gln Gly Asp Gly Ala Ala Leu Gln  
 20 25 30  
 Glu Lys Leu Val Ser Glu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu  
 35 40 45  
 Glu Leu Val Leu Leu Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu

50		55		60
Ser Ser Cys Pro Ser	Gln Ala Leu Gln Leu	Ala Gly Cys Leu Ser Gln		
65	70	75	80	
Leu His Ser Gly Leu	Phe Leu Tyr Gln Gly Leu Leu	Gln Ala Leu Glu		
	85	90	95	
Gly Ile Ser Pro Glu Leu	Gly Pro Thr Leu Asp Thr Leu	Gln Leu Asp		
	100	105	110	
Val Ala Asp Phe Ala Thr	Thr Ile Trp Gln Gln Met Glu	Glu Leu Gly		
	115	120	125	
Met Ala Pro Ala Leu Gln	Ser Thr Gln Gly Ala Met Pro	Ala Phe Ala		
	130	135	140	
Ser Ala Phe Gln Arg Arg	Ala Gly Gly Val Leu Val Ala	Ser His Leu		
145	150	155	160	
Gln Ser Phe Leu Glu Val	Ser Tyr Arg Val Leu Arg His	Leu Ala Gln		
	165	170	175	

Pro

<210> 654  
 <211> 177  
 <212> PRT  
 <213> homo sapiens

<400> 654
Thr Pro Leu Gly Pro Ala Ser Ser Leu Pro Gln Ser Phe Leu Leu Lys
1 5 10 15
Cys Leu Glu Gln Val Arg Lys Ile Gln Gly Asp Gly Ala Ala Leu Gln
20 25 30
Glu Lys Leu Val Ser Glu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu
35 40 45
Glu Leu Val Leu Leu Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu
50 55 60
Ser Ser Cys Pro Ser Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln
65 70 75 80
Leu His Ser Gly Leu Phe Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu
85 90 95
Gly Ile Ser Pro Glu Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp
100 105 110
Val Ala Asp Phe Ala Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly
115 120 125
Met Ala Pro Ala Leu Gln Ala Thr Gln Gly Ala Met Pro Ala Phe Ala
130 135 140
Ser Ala Phe Gln Arg Arg Ala Gly Gly Val Leu Val Ala Ser His Leu
145 150 155 160
Gln Ser Phe Leu Glu Val Ser Tyr Arg Val Leu Arg His Leu Ala Gln
165 170 175

Pro

<210> 655  
 <211> 177  
 <212> PRT  
 <213> homo sapiens

<400> 655
Thr Pro Leu Gly Pro Ala Ser Ser Leu Pro Gln Ser Phe Leu Leu Lys
1 5 10 15
Cys Leu Glu Gln Val Arg Lys Ile Gln Gly Asp Gly Ala Ala Leu Gln
20 25 30
Glu Lys Leu Val Ser Glu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu
35 40 45
Glu Leu Val Leu Leu Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu
50 55 60

Ser Ser Cys Pro Ser Ala Leu Gln Leu Ala Gly Cys Leu Gln  
 65 70 75 80  
 Leu His Ser Gly Leu Phe Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu  
 85 90 95  
 Gly Ile Ser Pro Glu Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp  
 100 105 110  
 Val Ala Asp Phe Ala Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly  
 115 120 125  
 Met Ala Pro Ala Leu Gln Pro Thr Gln Gly Ala Met Pro Ala Phe Ala  
 130 135 140  
 Ser Ala Ile Gln Arg Arg Ala Gly Gly Val Leu Val Ala Ser His Leu  
 145 150 155 160  
 Gln Ser Phe Leu Glu Val Ser Tyr Arg Val Leu Arg His Leu Ala Gln  
 165 170 175  
 Pro

<210> 656  
 <211> 177  
 <212> PRT  
 <213> homo sapiens

<400> 656  
 Thr Pro Leu Gly Pro Ala Ser Ser Leu Pro Gln Ser Phe Leu Leu Lys  
 1 5 10 15  
 Cys Leu Glu Gln Val Arg Lys Ile Gln Gly Asp Gly Ala Ala Leu Gln  
 20 25 30  
 Glu Lys Leu Val Ser Glu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu  
 35 40 45  
 Glu Leu Val Leu Leu Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu  
 50 55 60  
 Ser Ser Cys Pro Ser Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln  
 65 70 75 80  
 Leu His Ser Gly Leu Phe Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu  
 85 90 95  
 Gly Ile Ser Pro Glu Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp  
 100 105 110  
 Val Ala Asp Phe Ala Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly  
 115 120 125  
 Met Ala Pro Ala Leu Gln Pro Thr Gln Gly Ala Met Pro Ala Phe Ala  
 130 135 140  
 Ser Ala Val Gln Arg Arg Ala Gly Gly Val Leu Val Ala Ser His Leu  
 145 150 155 160  
 Gln Ser Phe Leu Glu Val Ser Tyr Arg Val Leu Arg His Leu Ala Gln  
 165 170 175  
 Pro

<210> 657  
 <211> 177  
 <212> PRT  
 <213> homo sapiens

<400> 657  
 Thr Pro Leu Gly Pro Ala Ser Ser Leu Pro Gln Ser Phe Leu Leu Lys  
 1 5 10 15  
 Cys Leu Glu Gln Val Arg Lys Ile Gln Gly Asp Gly Ala Ala Leu Gln  
 20 25 30  
 Glu Lys Leu Val Ser Glu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu  
 35 40 45  
 Glu Leu Val Leu Leu Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu  
 50 55 60  
 Ser Ser Cys Pro Ser Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln

65	Leu	His	Ser	Gly	Leu	Phe	Leu	Tyr	Gln	Gly	Leu	Leu	Gln	Ala	Leu	Glu	80
					85					90							95
	Gly	Ile	Ser	Pro	Glu	Leu	Gly	Pro	Thr	Leu	Asp	Thr	Leu	Gln	Leu	Asp	
				100					105					110			
	Val	Ala	Asp	Phe	Ala	Thr	Thr	Ile	Trp	Gln	Gln	Met	Glu	Glu	Leu	Gly	
			115					120					125				
	Met	Ala	Pro	Ala	Leu	Gln	Pro	Thr	Gln	Gly	Ala	Met	Pro	Ala	Phe	Ala	
		130					135					140					
	Ser	Ala	Phe	Gln	Arg	Arg	Ala	Gly	Gly	Val	Leu	Val	Ala	Ser	His	Leu	
	145				150						155					160	
	Gln	Ser	Phe	Leu	Glu	Val	Ser	Tyr	His	Val	Leu	Arg	His	Leu	Ala	Gln	
				165						170					175		
	Pro																

<210> 658  
 <211> 177  
 <212> PRT  
 <213> homo sapiens

<400> 658	Thr	Pro	Leu	Gly	Pro	Ala	Ser	Ser	Leu	Pro	Gln	Ser	Phe	Leu	Leu	Lys
	1				5				10						15	
	Cys	Leu	Glu	Gln	Val	Arg	Lys	Ile	Gln	Gly	Asp	Gly	Ala	Ala	Leu	Gln
			20						25					30		
	Glu	Lys	Leu	Val	Ser	Glu	Cys	Ala	Thr	Tyr	Lys	Leu	Cys	His	Pro	Glu
		35					40						45			
	Glu	Leu	Val	Leu	Leu	Gly	His	Ser	Leu	Gly	Ile	Pro	Trp	Ala	Pro	Leu
		50				55					60					
	Ser	Ser	Cys	Pro	Ser	Gln	Ala	Leu	Gln	Leu	Ala	Gly	Cys	Leu	Ser	Gln
	65				70				75						80	
	Leu	His	Ser	Gly	Leu	Phe	Leu	Tyr	Gln	Gly	Leu	Leu	Gln	Ala	Leu	Glu
				85					90						95	
	Gly	Ile	Ser	Pro	Glu	Leu	Gly	Pro	Thr	Leu	Asp	Thr	Leu	Gln	Leu	Asp
				100					105					110		
	Val	Ala	Asp	Phe	Ala	Thr	Thr	Ile	Trp	Gln	Gln	Met	Glu	Glu	Leu	Gly
			115					120					125			
	Met	Ala	Pro	Ala	Leu	Gln	Pro	Thr	Gln	Gly	Ala	Met	Pro	Ala	Phe	Ala
		130					135					140				
	Ser	Ala	Phe	Gln	Arg	Arg	Ala	Gly	Gly	Val	Leu	Val	Ala	Ser	His	Leu
	145				150						155					160
	Gln	Ser	Phe	Leu	Glu	Val	Ser	Tyr	Gln	Val	Leu	Arg	His	Leu	Ala	Gln
				165					170						175	
	Pro															

<210> 659  
 <211> 177  
 <212> PRT  
 <213> homo sapiens

<400> 659	Thr	Pro	Leu	Gly	Pro	Ala	Ser	Ser	Leu	Pro	Gln	Ser	Phe	Leu	Leu	Lys
	1				5				10						15	
	Cys	Leu	Glu	Gln	Val	Arg	Lys	Ile	Gln	Gly	Asp	Gly	Ala	Ala	Leu	Gln
			20						25					30		
	Glu	Lys	Leu	Val	Ser	Glu	Cys	Ala	Thr	Tyr	Lys	Leu	Cys	His	Pro	Glu
		35					40						45			
	Glu	Leu	Val	Leu	Leu	Gly	His	Ser	Leu	Gly	Ile	Pro	Trp	Ala	Pro	Leu
		50				55					60					
	Ser	Ser	Cys	Pro	Ser	Gln	Ala	Leu	Gln	Leu	Ala	Gly	Cys	Leu	Ser	Gln
	65				70				75						80	

Leu His Ser Gly Leu 85 Leu Tyr Gln Gly Leu Leu Gln Ala 95 Glu  
 Gly Ile Ser Pro Glu Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp  
 100 105 110  
 Val Ala Asp Phe Ala Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly  
 115 120 125  
 Met Ala Pro Ala Leu Gln Pro Thr Gln Gly Ala Met Pro Ala Phe Ala  
 130 135 140  
 Ser Ala Phe Gln Arg Arg Ala Gly Gly Val Leu Val Ala Ser His Leu  
 145 150 155 160  
 Gln Ser Phe Leu Glu Val Ser Tyr Arg Val Leu His His Leu Ala Gln  
 165 170 175  
 Pro

<210> 660  
 <211> 177  
 <212> PRT  
 <213> homo sapiens

<400> 660  
 Thr Pro Leu Gly Pro Ala Ser Ser Leu Pro Gln Ser Phe Leu Leu Lys  
 1 5 10 15  
 Cys Leu Glu Gln Val Arg Lys Ile Gln Gly Asp Gly Ala Ala Leu Gln  
 20 25 30  
 Glu Lys Leu Val Ser Glu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu  
 35 40 45  
 Glu Leu Val Leu Leu Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu  
 50 55 60  
 Ser Ser Cys Pro Ser Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln  
 65 70 75 80  
 Leu His Ser Gly Leu Phe Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu  
 85 90 95  
 Gly Ile Ser Pro Glu Leu Gly Pro Thr Leu Asp Thr Leu Gln Leu Asp  
 100 105 110  
 Val Ala Asp Phe Ala Thr Thr Ile Trp Gln Gln Met Glu Glu Leu Gly  
 115 120 125  
 Met Ala Pro Ala Leu Gln Pro Thr Gln Gly Ala Met Pro Ala Phe Ala  
 130 135 140  
 Ser Ala Phe Gln Arg Arg Ala Gly Gly Val Leu Val Ala Ser His Leu  
 145 150 155 160  
 Gln Ser Phe Leu Glu Val Ser Tyr Arg Val Leu Gln His Leu Ala Gln  
 165 170 175  
 Pro

<210> 661  
 <211> 177  
 <212> PRT  
 <213> homo sapiens

<400> 661  
 Thr Pro Leu Gly Pro Ala Ser Ser Leu Pro Gln Ser Phe Leu Leu Lys  
 1 5 10 15  
 Cys Leu Glu Gln Val Arg Lys Ile Gln Gly Asp Gly Ala Ala Leu Gln  
 20 25 30  
 Glu Lys Leu Val Ser Glu Cys Ala Thr Tyr Lys Leu Cys His Pro Glu  
 35 40 45  
 Glu Leu Val Leu Leu Gly His Ser Leu Gly Ile Pro Trp Ala Pro Leu  
 50 55 60  
 Ser Ser Cys Pro Ser Gln Ala Leu Gln Leu Ala Gly Cys Leu Ser Gln  
 65 70 75 80  
 Leu His Ser Gly Leu Phe Leu Tyr Gln Gly Leu Leu Gln Ala Leu Glu



His Leu Pro Trp Ala Gly Leu Glu Thr Leu Asp Ser Leu Gly  
 100 105 110  
 Val Leu Glu Ala Ser Gly Tyr Ser Thr Glu Val Val Ala Leu Ser Arg  
 115 120 125  
 Leu Gln Gly Ser Leu Gln Asp Met Leu Trp Gln Leu Asp Leu Ser Pro  
 130 135 140  
 Gly Cys  
 145

<210> 664  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

<400> 664  
 Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys Thr Leu Ile Lys Thr  
 1 5 10 15  
 Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr Gln Ser Val Ser Ser  
 20 25 30  
 Lys Gln Lys Val Thr Gly Leu Asp Phe Ile Ala Gly Leu His Pro Ile  
 35 40 45  
 Leu Thr Leu Ser Lys Met Asp Gln Thr Leu Ala Val Tyr Gln Gln Ile  
 50 55 60  
 Leu Thr Ser Met Pro Ser Arg Asn Val Ile Gln Ile Ser Asn Asp Leu  
 65 70 75 80  
 Glu Asn Leu Arg Asp Leu Leu His Val Leu Ala Phe Ser Lys Ser Cys  
 85 90 95  
 His Leu Pro Trp Ala Ser Gly Leu Glu Thr Leu Asp Ser Leu Gly Gly  
 100 105 110  
 Val Leu Glu Ala Ser Gly Tyr Ser Thr Glu Val Val Ala Leu Ser Arg  
 115 120 125  
 Leu Gln Gly Ser Leu Gln Asp Met Leu Trp Gln Leu Asp Leu Ser Pro  
 130 135 140  
 Gly Cys  
 145

<210> 665  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

<400> 665  
 Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys Thr Leu Ile Lys Thr  
 1 5 10 15  
 Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr Gln Ser Val Ser Ser  
 20 25 30  
 Lys Gln Lys Val Thr Gly Leu Asp Phe Ile Pro Gly Leu His Pro Ile  
 35 40 45  
 Val Thr Leu Ser Lys Met Asp Gln Thr Leu Ala Val Tyr Gln Gln Ile  
 50 55 60  
 Leu Thr Ser Met Pro Ser Arg Asn Val Ile Gln Ile Ser Asn Asp Leu  
 65 70 75 80  
 Glu Asn Leu Arg Asp Leu Leu His Val Leu Ala Phe Ser Lys Ser Cys  
 85 90 95  
 His Leu Pro Trp Ala Ser Gly Leu Glu Thr Leu Asp Ser Leu Gly Gly  
 100 105 110  
 Val Leu Glu Ala Ser Gly Tyr Ser Thr Glu Val Val Ala Leu Ser Arg  
 115 120 125  
 Leu Gln Gly Ser Leu Gln Asp Met Leu Trp Gln Leu Asp Leu Ser Pro  
 130 135 140  
 Gly Cys  
 145

<210> 666  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

<400> 666

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Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys Thr Leu Ile Lys Thr
1          5          10          15
Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr Gln Ser Val Ser Ser
20          25          30
Lys Gln Lys Val Thr Gly Leu Asp Phe Ile Pro Gly Leu His Pro Ile
35          40          45
Ile Thr Leu Ser Lys Met Asp Gln Thr Leu Ala Val Tyr Gln Gln Ile
50          55          60
Leu Thr Ser Met Pro Ser Arg Asn Val Ile Gln Ile Ser Asn Asp Leu
65          70          75          80
Glu Asn Leu Arg Asp Leu Leu His Val Leu Ala Phe Ser Lys Ser Cys
85          90          95
His Leu Pro Trp Ala Ser Gly Leu Glu Thr Leu Asp Ser Leu Gly Gly
100         105         110
Val Leu Glu Ala Ser Gly Tyr Ser Thr Glu Val Val Ala Leu Ser Arg
115         120         125
Leu Gln Gly Ser Leu Gln Asp Met Leu Trp Gln Leu Asp Leu Ser Pro
130         135         140
Gly Cys
145

```

<210> 667  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

<400> 667

```

Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys Thr Leu Ile Lys Thr
1          5          10          15
Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr Gln Ser Val Ser Ser
20          25          30
Lys Gln Lys Val Thr Gly Leu Asp Phe Ile Pro Gly Leu His Pro Ile
35          40          45
Leu Thr Leu Ser Lys Met Asp Gln Thr Leu Ala Val Tyr Gln Gln Ile
50          55          60
Leu Thr Ser Met Pro Ser Arg Asn Val Ile Gln Ile Ser Asn Asp Leu
65          70          75          80
Glu Asn Leu Arg Asp Leu Leu His Val Leu Ala Phe Ser Lys Ser Cys
85          90          95
His Leu Ser Trp Ala Ser Gly Leu Glu Thr Leu Asp Ser Leu Gly Gly
100         105         110
Val Leu Glu Ala Ser Gly Tyr Ser Thr Glu Val Val Ala Leu Ser Arg
115         120         125
Leu Gln Gly Ser Leu Gln Asp Met Leu Trp Gln Leu Asp Leu Ser Pro
130         135         140
Gly Cys
145

```

<210> 668  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

<400> 668

```

Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys Thr Leu Ile Lys Thr
1          5          10          15
Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr Gln Ser Val Ser Ser

```





His Leu Pro His Ala Gly Leu Glu Thr Leu Asp Ser Leu Gly  
 100 105 110  
 Val Leu Glu Ala Ser Gly Tyr Ser Thr Glu Val Val Ala Leu Ser Arg  
 115 120 125  
 Leu Gln Gly Ser Leu Gln Asp Met Leu Trp Gln Leu Asp Leu Ser Pro  
 130 135 140  
 Gly Cys  
 145

<210> 671  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

<400> 671  
 Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys Thr Leu Ile Lys Thr  
 1 5 10 15  
 Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr Gln Ser Val Ser Ser  
 20 25 30  
 Lys Gln Lys Val Thr Gly Leu Asp Phe Ile Pro Gly Leu His Pro Ile  
 35 40 45  
 Leu Thr Leu Ser Lys Met Asp Gln Thr Leu Ala Val Tyr Gln Gln Ile  
 50 55 60  
 Leu Thr Ser Met Pro Ser Arg Asn Val Ile Gln Ile Ser Asn Asp Leu  
 65 70 75 80  
 Glu Asn Leu Arg Asp Leu Leu His Val Leu Ala Phe Ser Lys Ser Cys  
 85 90 95  
 His Leu Pro Trp Ala Ser Gly Val Glu Thr Leu Asp Ser Leu Gly Gly  
 100 105 110  
 Val Leu Glu Ala Ser Gly Tyr Ser Thr Glu Val Val Ala Leu Ser Arg  
 115 120 125  
 Leu Gln Gly Ser Leu Gln Asp Met Leu Trp Gln Leu Asp Leu Ser Pro  
 130 135 140  
 Gly Cys  
 145

<210> 672  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

<400> 672  
 Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys Thr Leu Ile Lys Thr  
 1 5 10 15  
 Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr Gln Ser Val Ser Ser  
 20 25 30  
 Lys Gln Lys Val Thr Gly Leu Asp Phe Ile Pro Gly Leu His Pro Ile  
 35 40 45  
 Leu Thr Leu Ser Lys Met Asp Gln Thr Leu Ala Val Tyr Gln Gln Ile  
 50 55 60  
 Leu Thr Ser Met Pro Ser Arg Asn Val Ile Gln Ile Ser Asn Asp Leu  
 65 70 75 80  
 Glu Asn Leu Arg Asp Leu Leu His Val Leu Ala Phe Ser Lys Ser Cys  
 85 90 95  
 His Leu Pro Trp Ala Ser Gly Ile Glu Thr Leu Asp Ser Leu Gly Gly  
 100 105 110  
 Val Leu Glu Ala Ser Gly Tyr Ser Thr Glu Val Val Ala Leu Ser Arg  
 115 120 125  
 Leu Gln Gly Ser Leu Gln Asp Met Leu Trp Gln Leu Asp Leu Ser Pro  
 130 135 140  
 Gly Cys  
 145

<210> 673  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

<400> 673  
 Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys Thr Leu Ile Lys Thr  
 1 5 10 15  
 Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr Gln Ser Val Ser Ser  
 20 25 30  
 Lys Gln Lys Val Thr Gly Leu Asp Phe Ile Pro Gly Leu His Pro Ile  
 35 40 45  
 Leu Thr Leu Ser Lys Met Asp Gln Thr Leu Ala Val Tyr Gln Gln Ile  
 50 55 60  
 Leu Thr Ser Met Pro Ser Arg Asn Val Ile Gln Ile Ser Asn Asp Leu  
 65 70 75 80  
 Glu Asn Leu Arg Asp Leu Leu His Val Leu Ala Phe Ser Lys Ser Cys  
 85 90 95  
 His Leu Pro Trp Ala Ser Gly Leu Gln Thr Leu Asp Ser Leu Gly Gly  
 100 105 110  
 Val Leu Glu Ala Ser Gly Tyr Ser Thr Glu Val Val Ala Leu Ser Arg  
 115 120 125  
 Leu Gln Gly Ser Leu Gln Asp Met Leu Trp Gln Leu Asp Leu Ser Pro  
 130 135 140  
 Gly Cys  
 145

<210> 674  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

<400> 674  
 Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys Thr Leu Ile Lys Thr  
 1 5 10 15  
 Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr Gln Ser Val Ser Ser  
 20 25 30  
 Lys Gln Lys Val Thr Gly Leu Asp Phe Ile Pro Gly Leu His Pro Ile  
 35 40 45  
 Leu Thr Leu Ser Lys Met Asp Gln Thr Leu Ala Val Tyr Gln Gln Ile  
 50 55 60  
 Leu Thr Ser Met Pro Ser Arg Asn Val Ile Gln Ile Ser Asn Asp Leu  
 65 70 75 80  
 Glu Asn Leu Arg Asp Leu Leu His Val Leu Ala Phe Ser Lys Ser Cys  
 85 90 95  
 His Leu Pro Trp Ala Ser Gly Leu Asn Thr Leu Asp Ser Leu Gly Gly  
 100 105 110  
 Val Leu Glu Ala Ser Gly Tyr Ser Thr Glu Val Val Ala Leu Ser Arg  
 115 120 125  
 Leu Gln Gly Ser Leu Gln Asp Met Leu Trp Gln Leu Asp Leu Ser Pro  
 130 135 140  
 Gly Cys  
 145

<210> 675  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

<400> 675  
 Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys Thr Leu Ile Lys Thr  
 1 5 10 15  
 Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr Gln Ser Val Ser Ser



His Leu Pro Trp Ala Gly Leu Glu Thr Ile Asp Ser Leu Gly  
100 105 110  
Val Leu Glu Ala Ser Gly Tyr Ser Thr Glu Val Val Ala Leu Ser Arg  
115 120 125  
Leu Gln Gly Ser Leu Gln Asp Met Leu Trp Gln Leu Asp Leu Ser Pro  
130 135 140  
Gly Cys  
145

<210> 678  
<211> 146  
<212> PRT  
<213> Homo sapiens

<400> 678  
Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys Thr Leu Ile Lys Thr  
1 5 10 15  
Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr Gln Ser Val Ser Ser  
20 25 30  
Lys Gln Lys Val Thr Gly Leu Asp Phe Ile Pro Gly Leu His Pro Ile  
35 40 45  
Leu Thr Leu Ser Lys Met Asp Gln Thr Leu Ala Val Tyr Gln Gln Ile  
50 55 60  
Leu Thr Ser Met Pro Ser Arg Asn Val Ile Gln Ile Ser Asn Asp Leu  
65 70 75 80  
Glu Asn Leu Arg Asp Leu Leu His Val Leu Ala Phe Ser Lys Ser Cys  
85 90 95  
His Leu Pro Trp Ala Ser Gly Leu Glu Thr Leu Gln Ser Leu Gly Gly  
100 105 110  
Val Leu Glu Ala Ser Gly Tyr Ser Thr Glu Val Val Ala Leu Ser Arg  
115 120 125  
Leu Gln Gly Ser Leu Gln Asp Met Leu Trp Gln Leu Asp Leu Ser Pro  
130 135 140  
Gly Cys  
145

<210> 679  
<211> 146  
<212> PRT  
<213> Homo sapiens

<400> 679  
Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys Thr Leu Ile Lys Thr  
1 5 10 15  
Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr Gln Ser Val Ser Ser  
20 25 30  
Lys Gln Lys Val Thr Gly Leu Asp Phe Ile Pro Gly Leu His Pro Ile  
35 40 45  
Leu Thr Leu Ser Lys Met Asp Gln Thr Leu Ala Val Tyr Gln Gln Ile  
50 55 60  
Leu Thr Ser Met Pro Ser Arg Asn Val Ile Gln Ile Ser Asn Asp Leu  
65 70 75 80  
Glu Asn Leu Arg Asp Leu Leu His Val Leu Ala Phe Ser Lys Ser Cys  
85 90 95  
His Leu Pro Trp Ala Ser Gly Leu Glu Thr Leu Asn Ser Leu Gly Gly  
100 105 110  
Val Leu Glu Ala Ser Gly Tyr Ser Thr Glu Val Val Ala Leu Ser Arg  
115 120 125  
Leu Gln Gly Ser Leu Gln Asp Met Leu Trp Gln Leu Asp Leu Ser Pro  
130 135 140  
Gly Cys  
145

<210> 680  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

<400> 680  
 Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys Thr Leu Ile Lys Thr  
 1 5 10 15  
 Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr Gln Ser Val Ser Ser  
 20 25 30  
 Lys Gln Lys Val Thr Gly Leu Asp Phe Ile Pro Gly Leu His Pro Ile  
 35 40 45  
 Leu Thr Leu Ser Lys Met Asp Gln Thr Leu Ala Val Tyr Gln Gln Ile  
 50 55 60  
 Leu Thr Ser Met Pro Ser Arg Asn Val Ile Gln Ile Ser Asn Asp Leu  
 65 70 75 80  
 Glu Asn Leu Arg Asp Leu Leu His Val Leu Ala Phe Ser Lys Ser Cys  
 85 90 95  
 His Leu Pro Trp Ala Ser Gly Leu Glu Thr Leu Asp Ser Leu Gly Gly  
 100 105 110  
 Val Leu Glu Ala Ser Gly Tyr Ser Thr Glu Val Val Ala Leu Ser Arg  
 115 120 125  
 Leu Gln Gly Ser Leu Gln Asp Met Leu Trp Gln Leu Gln Leu Ser Pro  
 130 135 140  
 Gly Cys  
 145

<210> 681  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

<400> 681  
 Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys Thr Leu Ile Lys Thr  
 1 5 10 15  
 Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr Gln Ser Val Ser Ser  
 20 25 30  
 Lys Gln Lys Val Thr Gly Leu Asp Phe Ile Pro Gly Leu His Pro Ile  
 35 40 45  
 Leu Thr Leu Ser Lys Met Asp Gln Thr Leu Ala Val Tyr Gln Gln Ile  
 50 55 60  
 Leu Thr Ser Met Pro Ser Arg Asn Val Ile Gln Ile Ser Asn Asp Leu  
 65 70 75 80  
 Glu Asn Leu Arg Asp Leu Leu His Val Leu Ala Phe Ser Lys Ser Cys  
 85 90 95  
 His Leu Pro Trp Ala Ser Gly Leu Glu Thr Leu Asp Ser Leu Gly Gly  
 100 105 110  
 Val Leu Glu Ala Ser Gly Tyr Ser Thr Glu Val Val Ala Leu Ser Arg  
 115 120 125  
 Leu Gln Gly Ser Leu Gln Asp Met Leu Trp Gln Leu Asn Leu Ser Pro  
 130 135 140  
 Gly Cys  
 145

<210> 682  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

<400> 682  
 Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys Thr Leu Ile Lys Thr  
 1 5 10 15  
 Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr Gln Ser Val Ser Ser



His	Phe	Thr	Pro	Thr	Gly	Asp	Phe	His	Gln	Ala	Ile	His	Leu
			100				105					110	
Leu	Leu	Gln	Val	Ala	Ala	Phe	Ala	Tyr	Gln	Ile	Glu	Glu	Leu
		115					120				125	Met	Ile
Leu	Leu	Glu	Tyr	Lys	Ile	Pro	Arg	Asn	Glu	Ala	Asp	Gly	Met
		130				135					140	Pro	Ile
Asn	Val	Gly	Asp	Gly	Gly	Leu	Phe	Glu	Lys	Lys	Leu	Trp	Gly
145				150					155			Leu	Lys
Val	Leu	Gln	Glu	Leu	Ser	Gln	Trp	Thr	Val	Arg	Ser	Ile	His
			165					170				Asp	Leu
Arg	Phe	Ile	Ser	Ser	His	Gln	Thr	Gly	Ile	Pro	Ala	Arg	Gly
		180						185				190	Ser
Tyr	Ile	Ala	Asn	Asn	Lys	Lys	Met						His
		195					200						

<210> 685  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

Met	Ala	Phe	Thr	Glu	His	Ser	Pro	Leu	Thr	Pro	His	Arg	Arg	Asp	Leu
1				5					10					15	
Cys	Ser	Arg	Ser	Ile	Trp	Leu	Ala	Arg	Lys	Ile	Arg	Ser	Asp	Leu	Thr
		20						25				30			
Ala	Leu	Thr	Glu	Ser	Tyr	Val	Lys	His	Gln	Gly	Leu	Asn	Lys	Asn	Ile
		35				40					45				
Asn	Leu	Asp	Ser	Ala	Asp	Gly	Met	Pro	Val	Ala	Ser	Thr	Asn	Gln	Trp
	50				55					60					
Ser	Glu	Leu	Thr	Glu	Ala	Glu	Arg	Leu	Gln	Glu	Asn	Leu	Gln	Ala	Tyr
65				70					75					80	
Arg	Thr	Phe	His	Val	Leu	Leu	Ala	Arg	Leu	Leu	Glu	Asp	Gln	Gln	Val
			85					90					95		
His	Phe	Thr	Pro	Thr	Glu	Gly	Asp	Phe	His	Gln	Ala	Ile	His	Thr	Leu
		100					105					110			
Leu	Leu	Gln	Val	Ala	Ala	Phe	Ala	Tyr	Gln	Ile	Glu	Glu	Leu	Met	Ile
		115					120					125			
Leu	Leu	Glu	Tyr	Lys	Ile	Pro	Arg	Asn	Glu	Ala	Asp	Gly	Met	Pro	Ile
		130				135					140				
Asn	Val	Gly	Asp	Gly	Gly	Leu	Phe	Glu	Lys	Lys	Leu	Trp	Gly	Leu	Lys
145				150					155					160	
Val	Leu	Gln	Glu	Leu	Ser	Gln	Trp	Thr	Val	Arg	Ser	Ile	His	Asp	Leu
			165					170					175		
Arg	Phe	Ile	Ser	Ser	His	Gln	Thr	Gly	Ile	Pro	Ala	Arg	Gly	Ser	His
		180						185					190		
Tyr	Ile	Ala	Asn	Asn	Lys	Lys	Met								
		195					200								

<210> 686  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

Met	Ala	Phe	Thr	Glu	His	Ser	Pro	Leu	Thr	Pro	His	Arg	Arg	Asp	Leu
1				5					10					15	
Cys	Ser	Arg	Ser	Ile	Trp	Leu	Ala	Arg	Lys	Ile	Arg	Ser	Asp	Leu	Thr
		20						25				30			
Ala	Leu	Thr	Glu	Ser	Tyr	Val	Lys	His	Gln	Gly	Leu	Asn	Lys	Asn	Ile
		35				40					45				
Asn	Leu	Asp	Ser	Ala	Asp	Gly	Met	Pro	Val	Ala	Ser	Thr	Asp	Gln	Ser
	50				55					60					
Ser	Glu	Leu	Thr	Glu	Ala	Glu	Arg	Leu	Gln	Glu	Asn	Leu	Gln	Ala	Tyr



65	Arg	Thr	Phe	His	Val	Leu	Leu	Ala	Arg	Leu	Leu	Glu	Asp	Gln	Gln	Val	80
					85					90							95
	His	Phe	Thr	Pro	Thr	Glu	Gly	Asp	Phe	His	Gln	Ala	Ile	His	Thr	Leu	
			100						105						110		
	Leu	Leu	Gln	Val	Ala	Ala	Phe	Ala	Tyr	Gln	Ile	Glu	Glu	Leu	Met	Ile	
			115						120						125		
	Leu	Leu	Glu	Tyr	Lys	Ile	Pro	Arg	Asn	Glu	Ala	Asp	Gly	Met	Pro	Ile	
			130						135					140			
	Asn	Val	Gly	Asp	Gly	Gly	Leu	Phe	Glu	Lys	Lys	Leu	Trp	Gly	Leu	Lys	
			145											155			160
	Val	Leu	Gln	Glu	Leu	Ser	Gln	Trp	Thr	Val	Arg	Ser	Ile	His	Asp	Leu	
					165												175
	Arg	Phe	Ile	Ser	Ser	His	Gln	Thr	Gly	Ile	Pro	Ala	Arg	Gly	Ser	His	
			180						185								190
	Tyr	Ile	Ala	Asn	Asn	Lys	Lys	Met									
			195					200									

<210> 687  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 687	Met	Ala	Phe	Thr	Glu	His	Ser	Pro	Leu	Thr	Pro	His	Arg	Arg	Asp	Leu	
	1				5					10					15		
	Cys	Ser	Arg	Ser	Ile	Trp	Leu	Ala	Arg	Lys	Ile	Arg	Ser	Asp	Leu	Thr	
				20					25					30			
	Ala	Leu	Thr	Glu	Ser	Tyr	Val	Lys	His	Gln	Gly	Leu	Asn	Lys	Asn	Ile	
				35				40					45				
	Asn	Leu	Asp	Ser	Ala	Asp	Gly	Met	Pro	Val	Ala	Ser	Thr	Asp	Gln	His	
				50			55					60					
	Ser	Glu	Leu	Thr	Glu	Ala	Glu	Arg	Leu	Gln	Glu	Asn	Leu	Gln	Ala	Tyr	
				65		70				75						80	
	Arg	Thr	Phe	His	Val	Leu	Leu	Ala	Arg	Leu	Leu	Glu	Asp	Gln	Gln	Val	
					85					90					95		
	His	Phe	Thr	Pro	Thr	Glu	Gly	Asp	Phe	His	Gln	Ala	Ile	His	Thr	Leu	
				100					105						110		
	Leu	Leu	Gln	Val	Ala	Ala	Phe	Ala	Tyr	Gln	Ile	Glu	Glu	Leu	Met	Ile	
				115					120						125		
	Leu	Leu	Glu	Tyr	Lys	Ile	Pro	Arg	Asn	Glu	Ala	Asp	Gly	Met	Pro	Ile	
				130					135					140			
	Asn	Val	Gly	Asp	Gly	Gly	Leu	Phe	Glu	Lys	Lys	Leu	Trp	Gly	Leu	Lys	
				145		150					155					160	
	Val	Leu	Gln	Glu	Leu	Ser	Gln	Trp	Thr	Val	Arg	Ser	Ile	His	Asp	Leu	
					165					170						175	
	Arg	Phe	Ile	Ser	Ser	His	Gln	Thr	Gly	Ile	Pro	Ala	Arg	Gly	Ser	His	
				180					185							190	
	Tyr	Ile	Ala	Asn	Asn	Lys	Lys	Met									
			195					200									

<210> 688  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 688	Met	Ala	Phe	Thr	Glu	His	Ser	Pro	Leu	Thr	Pro	His	Arg	Arg	Asp	Leu	
	1				5					10					15		
	Cys	Ser	Arg	Ser	Ile	Trp	Leu	Ala	Arg	Lys	Ile	Arg	Ser	Asp	Leu	Thr	
				20					25					30			
	Ala	Leu	Thr	Glu	Ser	Tyr	Val	Lys	His	Gln	Gly	Leu	Asn	Lys	Asn	Ile	
				35				40					45				

Asn Leu Asp Ser Ala Gly Met Pro Val Ala Ser Thr Asp Trp  
 50 55 60  
 Ser Gln Leu Thr Glu Ala Glu Arg Leu Gln Glu Asn Leu Gln Ala Tyr  
 65 70 75 80  
 Arg Thr Phe His Val Leu Leu Ala Arg Leu Leu Glu Asp Gln Gln Val  
 85 90 95  
 His Phe Thr Pro Thr Glu Gly Asp Phe His Gln Ala Ile His Thr Leu  
 100 105 110  
 Leu Leu Gln Val Ala Ala Phe Ala Tyr Gln Ile Glu Glu Leu Met Ile  
 115 120 125  
 Leu Leu Glu Tyr Lys Ile Pro Arg Asn Glu Ala Asp Gly Met Pro Ile  
 130 135 140  
 Asn Val Gly Asp Gly Gly Leu Phe Glu Lys Lys Leu Trp Gly Leu Lys  
 145 150 155 160  
 Val Leu Gln Glu Leu Ser Gln Trp Thr Val Arg Ser Ile His Asp Leu  
 165 170 175  
 Arg Phe Ile Ser Ser His Gln Thr Gly Ile Pro Ala Arg Gly Ser His  
 180 185 190  
 Tyr Ile Ala Asn Asn Lys Lys Met  
 195 200

<210> 689  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 689  
 Met Ala Phe Thr Glu His Ser Pro Leu Thr Pro His Arg Arg Asp Leu  
 1 5 10 15  
 Cys Ser Arg Ser Ile Trp Leu Ala Arg Lys Ile Arg Ser Asp Leu Thr  
 20 25 30  
 Ala Leu Thr Glu Ser Tyr Val Lys His Gln Gly Leu Asn Lys Asn Ile  
 35 40 45  
 Asn Leu Asp Ser Ala Asp Gly Met Pro Val Ala Ser Thr Asp Gln Trp  
 50 55 60  
 Ser Asn Leu Thr Glu Ala Glu Arg Leu Gln Glu Asn Leu Gln Ala Tyr  
 65 70 75 80  
 Arg Thr Phe His Val Leu Leu Ala Arg Leu Leu Glu Asp Gln Gln Val  
 85 90 95  
 His Phe Thr Pro Thr Glu Gly Asp Phe His Gln Ala Ile His Thr Leu  
 100 105 110  
 Leu Leu Gln Val Ala Ala Phe Ala Tyr Gln Ile Glu Glu Leu Met Ile  
 115 120 125  
 Leu Leu Glu Tyr Lys Ile Pro Arg Asn Glu Ala Asp Gly Met Pro Ile  
 130 135 140  
 Asn Val Gly Asp Gly Gly Leu Phe Glu Lys Lys Leu Trp Gly Leu Lys  
 145 150 155 160  
 Val Leu Gln Glu Leu Ser Gln Trp Thr Val Arg Ser Ile His Asp Leu  
 165 170 175  
 Arg Phe Ile Ser Ser His Gln Thr Gly Ile Pro Ala Arg Gly Ser His  
 180 185 190  
 Tyr Ile Ala Asn Asn Lys Lys Met  
 195 200

<210> 690  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 690  
 Met Ala Phe Thr Glu His Ser Pro Leu Thr Pro His Arg Arg Asp Leu  
 1 5 10 15  
 Cys Ser Arg Ser Ile Trp Leu Ala Arg Lys Ile Arg Ser Asp Leu Thr

Ala	Leu	Thr	Glu	Ser	Tyr	Val	Lys	His	Gln	Gly	Leu	Asn	Lys	Asn	Ile
	35						40					45			
Asn	Leu	Asp	Ser	Ala	Asp	Gly	Met	Pro	Val	Ala	Ser	Thr	Asp	Gln	Trp
	50					55					60				
Ser	His	Leu	Thr	Glu	Ala	Glu	Arg	Leu	Gln	Glu	Asn	Leu	Gln	Ala	Tyr
65					70					75				80	
Arg	Thr	Phe	His	Val	Leu	Leu	Ala	Arg	Leu	Leu	Glu	Asp	Gln	Gln	Val
			85						90					95	
His	Phe	Thr	Pro	Thr	Glu	Gly	Asp	Phe	His	Gln	Ala	Ile	His	Thr	Leu
			100					105					110		
Leu	Leu	Gln	Val	Ala	Ala	Phe	Ala	Tyr	Gln	Ile	Glu	Glu	Leu	Met	Ile
	115						120					125			
Leu	Leu	Glu	Tyr	Lys	Ile	Pro	Arg	Asn	Glu	Ala	Asp	Gly	Met	Pro	Ile
	130					135					140				
Asn	Val	Gly	Asp	Gly	Gly	Leu	Phe	Glu	Lys	Lys	Leu	Trp	Gly	Leu	Lys
145					150					155				160	
Val	Leu	Gln	Glu	Leu	Ser	Gln	Trp	Thr	Val	Arg	Ser	Ile	His	Asp	Leu
				165					170					175	
Arg	Phe	Ile	Ser	Ser	His	Gln	Thr	Gly	Ile	Pro	Ala	Arg	Gly	Ser	His
			180					185					190		
Tyr	Ile	Ala	Asn	Asn	Lys	Lys	Met								
	195						200								

<210> 691

<211> 200

<212> PRT

<213> Homo sapiens

<400> 691

Met	Ala	Phe	Thr	Glu	His	Ser	Pro	Leu	Thr	Pro	His	Arg	Arg	Asp	Leu
1				5					10					15	
Cys	Ser	Arg	Ser	Ile	Trp	Leu	Ala	Arg	Lys	Ile	Arg	Ser	Asp	Leu	Thr
			20					25				30			
Ala	Leu	Thr	Glu	Ser	Tyr	Val	Lys	His	Gln	Gly	Leu	Asn	Lys	Asn	Ile
	35						40					45			
Asn	Leu	Asp	Ser	Ala	Asp	Gly	Met	Pro	Val	Ala	Ser	Thr	Asp	Gln	Trp
	50					55					60				
Ser	Glu	Val	Thr	Glu	Ala	Glu	Arg	Leu	Gln	Glu	Asn	Leu	Gln	Ala	Tyr
65					70					75				80	
Arg	Thr	Phe	His	Val	Leu	Leu	Ala	Arg	Leu	Leu	Glu	Asp	Gln	Gln	Val
			85						90					95	
His	Phe	Thr	Pro	Thr	Glu	Gly	Asp	Phe	His	Gln	Ala	Ile	His	Thr	Leu
			100					105					110		
Leu	Leu	Gln	Val	Ala	Ala	Phe	Ala	Tyr	Gln	Ile	Glu	Glu	Leu	Met	Ile
	115						120					125			
Leu	Leu	Glu	Tyr	Lys	Ile	Pro	Arg	Asn	Glu	Ala	Asp	Gly	Met	Pro	Ile
	130					135					140				
Asn	Val	Gly	Asp	Gly	Gly	Leu	Phe	Glu	Lys	Lys	Leu	Trp	Gly	Leu	Lys
145					150					155				160	
Val	Leu	Gln	Glu	Leu	Ser	Gln	Trp	Thr	Val	Arg	Ser	Ile	His	Asp	Leu
				165					170					175	
Arg	Phe	Ile	Ser	Ser	His	Gln	Thr	Gly	Ile	Pro	Ala	Arg	Gly	Ser	His
			180					185					190		
Tyr	Ile	Ala	Asn	Asn	Lys	Lys	Met								
	195						200								

<210> 692

<211> 200

<212> PRT

<213> Homo sapiens

<400> 692

Met	Ala	Phe	Thr	Glu		Ser	Pro	Leu	Thr	Pro	His	Arg	Arg		Leu
1				5					10					15	
Cys	Ser	Arg	Ser	Ile	Trp	Leu	Ala	Arg	Lys	Ile	Arg	Ser	Asp	Leu	Thr
			20					25					30		
Ala	Leu	Thr	Glu	Ser	Tyr	Val	Lys	His	Gln	Gly	Leu	Asn	Lys	Asn	Ile
		35				40						45			
Asn	Leu	Asp	Ser	Ala	Asp	Gly	Met	Pro	Val	Ala	Ser	Thr	Asp	Gln	Trp
	50					55					60				
Ser	Glu	Ile	Thr	Glu	Ala	Glu	Arg	Leu	Gln	Glu	Asn	Leu	Gln	Ala	Tyr
65				70					75						80
Arg	Thr	Phe	His	Val	Leu	Leu	Ala	Arg	Leu	Leu	Glu	Asp	Gln	Gln	Val
			85					90						95	
His	Phe	Thr	Pro	Thr	Glu	Gly	Asp	Phe	His	Gln	Ala	Ile	His	Thr	Leu
			100					105					110		
Leu	Leu	Gln	Val	Ala	Ala	Phe	Ala	Tyr	Gln	Ile	Glu	Glu	Leu	Met	Ile
		115					120					125			
Leu	Leu	Glu	Tyr	Lys	Ile	Pro	Arg	Asn	Glu	Ala	Asp	Gly	Met	Pro	Ile
	130					135					140				
Asn	Val	Gly	Asp	Gly	Gly	Leu	Phe	Glu	Lys	Lys	Leu	Trp	Gly	Leu	Lys
145				150					155						160
Val	Leu	Gln	Glu	Leu	Ser	Gln	Trp	Thr	Val	Arg	Ser	Ile	His	Asp	Leu
				165				170						175	
Arg	Phe	Ile	Ser	Ser	His	Gln	Thr	Gly	Ile	Pro	Ala	Arg	Gly	Ser	His
			180					185					190		
Tyr	Ile	Ala	Asn	Asn	Lys	Lys	Met								
		195					200								

<210> 693  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

Met	Ala	Phe	Thr	Glu	His	Ser	Pro	Leu	Thr	Pro	His	Arg	Arg	Asp	Leu
1				5					10					15	
Cys	Ser	Arg	Ser	Ile	Trp	Leu	Ala	Arg	Lys	Ile	Arg	Ser	Asp	Leu	Thr
			20					25					30		
Ala	Leu	Thr	Glu	Ser	Tyr	Val	Lys	His	Gln	Gly	Leu	Asn	Lys	Asn	Ile
		35				40						45			
Asn	Leu	Asp	Ser	Ala	Asp	Gly	Met	Pro	Val	Ala	Ser	Thr	Asp	Gln	Trp
	50					55					60				
Ser	Glu	Leu	Thr	Glu	Ala	Glu	Arg	Leu	Gln	Glu	Asn	Leu	Gln	Ala	Tyr
65				70					75						80
Arg	Thr	Phe	His	Val	Val	Leu	Ala	Arg	Leu	Leu	Glu	Asp	Gln	Gln	Val
			85					90						95	
His	Phe	Thr	Pro	Thr	Glu	Gly	Asp	Phe	His	Gln	Ala	Ile	His	Thr	Leu
			100					105					110		
Leu	Leu	Gln	Val	Ala	Ala	Phe	Ala	Tyr	Gln	Ile	Glu	Glu	Leu	Met	Ile
		115					120					125			
Leu	Leu	Glu	Tyr	Lys	Ile	Pro	Arg	Asn	Glu	Ala	Asp	Gly	Met	Pro	Ile
	130					135					140				
Asn	Val	Gly	Asp	Gly	Gly	Leu	Phe	Glu	Lys	Lys	Leu	Trp	Gly	Leu	Lys
145				150					155						160
Val	Leu	Gln	Glu	Leu	Ser	Gln	Trp	Thr	Val	Arg	Ser	Ile	His	Asp	Leu
				165				170						175	
Arg	Phe	Ile	Ser	Ser	His	Gln	Thr	Gly	Ile	Pro	Ala	Arg	Gly	Ser	His
			180					185					190		
Tyr	Ile	Ala	Asn	Asn	Lys	Lys	Met								
		195					200								

<210> 694  
 <211> 200  
 <212> PRT

<213> Homo sapiens

<400> 694

Met	Ala	Phe	Thr	Glu	His	Ser	Pro	Leu	Thr	Pro	His	Arg	Arg	Asp	Leu
1				5					10					15	
Cys	Ser	Arg	Ser	Ile	Trp	Leu	Ala	Arg	Lys	Ile	Arg	Ser	Asp	Leu	Thr
			20					25					30		
Ala	Leu	Thr	Glu	Ser	Tyr	Val	Lys	His	Gln	Gly	Leu	Asn	Lys	Asn	Ile
			35				40					45			
Asn	Leu	Asp	Ser	Ala	Asp	Gly	Met	Pro	Val	Ala	Ser	Thr	Asp	Gln	Trp
50						55					60				
Ser	Glu	Leu	Thr	Glu	Ala	Glu	Arg	Leu	Gln	Glu	Asn	Leu	Gln	Ala	Tyr
65					70					75				80	
Arg	Thr	Phe	His	Val	Ile	Leu	Ala	Arg	Leu	Leu	Glu	Asp	Gln	Gln	Val
				85					90					95	
His	Phe	Thr	Pro	Thr	Glu	Gly	Asp	Phe	His	Gln	Ala	Ile	His	Thr	Leu
			100					105					110		
Leu	Leu	Gln	Val	Ala	Ala	Phe	Ala	Tyr	Gln	Ile	Glu	Glu	Leu	Met	Ile
			115				120					125			
Leu	Leu	Glu	Tyr	Lys	Ile	Pro	Arg	Asn	Glu	Ala	Asp	Gly	Met	Pro	Ile
130						135					140				
Asn	Val	Gly	Asp	Gly	Gly	Leu	Phe	Glu	Lys	Lys	Leu	Trp	Gly	Leu	Lys
145						150				155				160	
Val	Leu	Gln	Glu	Leu	Ser	Gln	Trp	Thr	Val	Arg	Ser	Ile	His	Asp	Leu
				165					170					175	
Arg	Phe	Ile	Ser	Ser	His	Gln	Thr	Gly	Ile	Pro	Ala	Arg	Gly	Ser	His
			180					185					190		
Tyr	Ile	Ala	Asn	Asn	Lys	Lys	Met								
			195				200								

<210> 695

<211> 200

<212> PRT

<213> Homo sapiens

<400> 695

Met	Ala	Phe	Thr	Glu	His	Ser	Pro	Leu	Thr	Pro	His	Arg	Arg	Asp	Leu
1				5					10					15	
Cys	Ser	Arg	Ser	Ile	Trp	Leu	Ala	Arg	Lys	Ile	Arg	Ser	Asp	Leu	Thr
			20					25					30		
Ala	Leu	Thr	Glu	Ser	Tyr	Val	Lys	His	Gln	Gly	Leu	Asn	Lys	Asn	Ile
			35				40					45			
Asn	Leu	Asp	Ser	Ala	Asp	Gly	Met	Pro	Val	Ala	Ser	Thr	Asp	Gln	Trp
50						55					60				
Ser	Glu	Leu	Thr	Glu	Ala	Glu	Arg	Leu	Gln	Glu	Asn	Leu	Gln	Ala	Tyr
65					70					75				80	
Arg	Thr	Phe	His	Val	Leu	Leu	Ala	His	Leu	Leu	Glu	Asp	Gln	Gln	Val
				85					90					95	
His	Phe	Thr	Pro	Thr	Glu	Gly	Asp	Phe	His	Gln	Ala	Ile	His	Thr	Leu
			100					105					110		
Leu	Leu	Gln	Val	Ala	Ala	Phe	Ala	Tyr	Gln	Ile	Glu	Glu	Leu	Met	Ile
			115				120					125			
Leu	Leu	Glu	Tyr	Lys	Ile	Pro	Arg	Asn	Glu	Ala	Asp	Gly	Met	Pro	Ile
130						135					140				
Asn	Val	Gly	Asp	Gly	Gly	Leu	Phe	Glu	Lys	Lys	Leu	Trp	Gly	Leu	Lys
145						150				155				160	
Val	Leu	Gln	Glu	Leu	Ser	Gln	Trp	Thr	Val	Arg	Ser	Ile	His	Asp	Leu
				165					170					175	
Arg	Phe	Ile	Ser	Ser	His	Gln	Thr	Gly	Ile	Pro	Ala	Arg	Gly	Ser	His
			180					185					190		
Tyr	Ile	Ala	Asn	Asn	Lys	Lys	Met								
			195				200								

<210> 696  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 696  
 Met Ala Phe Thr Glu His Ser Pro Leu Thr Pro His Arg Arg Asp Leu  
 1 5 10 15  
 Cys Ser Arg Ser Ile Trp Leu Ala Arg Lys Ile Arg Ser Asp Leu Thr  
 20 25 30  
 Ala Leu Thr Glu Ser Tyr Val Lys His Gln Gly Leu Asn Lys Asn Ile  
 35 40 45  
 Asn Leu Asp Ser Ala Asp Gly Met Pro Val Ala Ser Thr Asp Gln Trp  
 50 55 60  
 Ser Glu Leu Thr Glu Ala Glu Arg Leu Gln Glu Asn Leu Gln Ala Tyr  
 65 70 75 80  
 Arg Thr Phe His Val Leu Leu Ala Gln Leu Leu Glu Asp Gln Gln Val  
 85 90 95  
 His Phe Thr Pro Thr Glu Gly Asp Phe His Gln Ala Ile His Thr Leu  
 100 105 110  
 Leu Leu Gln Val Ala Ala Phe Ala Tyr Gln Ile Glu Glu Leu Met Ile  
 115 120 125  
 Leu Leu Glu Tyr Lys Ile Pro Arg Asn Glu Ala Asp Gly Met Pro Ile  
 130 135 140  
 Asn Val Gly Asp Gly Gly Leu Phe Glu Lys Lys Leu Trp Gly Leu Lys  
 145 150 155 160  
 Val Leu Gln Glu Leu Ser Gln Trp Thr Val Arg Ser Ile His Asp Leu  
 165 170 175  
 Arg Phe Ile Ser Ser His Gln Thr Gly Ile Pro Ala Arg Gly Ser His  
 180 185 190  
 Tyr Ile Ala Asn Asn Lys Lys Met  
 195 200

<210> 697  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 697  
 Met Ala Phe Thr Glu His Ser Pro Leu Thr Pro His Arg Arg Asp Leu  
 1 5 10 15  
 Cys Ser Arg Ser Ile Trp Leu Ala Arg Lys Ile Arg Ser Asp Leu Thr  
 20 25 30  
 Ala Leu Thr Glu Ser Tyr Val Lys His Gln Gly Leu Asn Lys Asn Ile  
 35 40 45  
 Asn Leu Asp Ser Ala Asp Gly Met Pro Val Ala Ser Thr Asp Gln Trp  
 50 55 60  
 Ser Glu Leu Thr Glu Ala Glu Arg Leu Gln Glu Asn Leu Gln Ala Tyr  
 65 70 75 80  
 Arg Thr Phe His Val Leu Leu Ala Arg Leu Leu Gln Asp Gln Gln Val  
 85 90 95  
 His Phe Thr Pro Thr Glu Gly Asp Phe His Gln Ala Ile His Thr Leu  
 100 105 110  
 Leu Leu Gln Val Ala Ala Phe Ala Tyr Gln Ile Glu Glu Leu Met Ile  
 115 120 125  
 Leu Leu Glu Tyr Lys Ile Pro Arg Asn Glu Ala Asp Gly Met Pro Ile  
 130 135 140  
 Asn Val Gly Asp Gly Gly Leu Phe Glu Lys Lys Leu Trp Gly Leu Lys  
 145 150 155 160  
 Val Leu Gln Glu Leu Ser Gln Trp Thr Val Arg Ser Ile His Asp Leu  
 165 170 175  
 Arg Phe Ile Ser Ser His Gln Thr Gly Ile Pro Ala Arg Gly Ser His  
 180 185 190

Tyr Ile Ala Asn Asn Lys Met  
195 200

<210> 698  
<211> 200  
<212> PRT  
<213> Homo sapiens

<400> 698  
Met Ala Phe Thr Glu His Ser Pro Leu Thr Pro His Arg Arg Asp Leu  
1 5 10 15  
Cys Ser Arg Ser Ile Trp Leu Ala Arg Lys Ile Arg Ser Asp Leu Thr  
20 25 30  
Ala Leu Thr Glu Ser Tyr Val Lys His Gln Gly Leu Asn Lys Asn Ile  
35 40 45  
Asn Leu Asp Ser Ala Asp Gly Met Pro Val Ala Ser Thr Asp Gln Trp  
50 55 60  
Ser Glu Leu Thr Glu Ala Glu Arg Leu Gln Glu Asn Leu Gln Ala Tyr  
65 70 75 80  
Arg Thr Phe His Val Leu Leu Ala Arg Leu Leu Asn Asp Gln Gln Val  
85 90 95  
His Phe Thr Pro Thr Glu Gly Asp Phe His Gln Ala Ile His Thr Leu  
100 105 110  
Leu Leu Gln Val Ala Ala Phe Ala Tyr Gln Ile Glu Glu Leu Met Ile  
115 120 125  
Leu Leu Glu Tyr Lys Ile Pro Arg Asn Glu Ala Asp Gly Met Pro Ile  
130 135 140  
Asn Val Gly Asp Gly Gly Leu Phe Glu Lys Lys Leu Trp Gly Leu Lys  
145 150 155 160  
Val Leu Gln Glu Leu Ser Gln Trp Thr Val Arg Ser Ile His Asp Leu  
165 170 175  
Arg Phe Ile Ser Ser His Gln Thr Gly Ile Pro Ala Arg Gly Ser His  
180 185 190  
Tyr Ile Ala Asn Asn Lys Lys Met  
195 200

<210> 699  
<211> 200  
<212> PRT  
<213> Homo sapiens

<400> 699  
Met Ala Phe Thr Glu His Ser Pro Leu Thr Pro His Arg Arg Asp Leu  
1 5 10 15  
Cys Ser Arg Ser Ile Trp Leu Ala Arg Lys Ile Arg Ser Asp Leu Thr  
20 25 30  
Ala Leu Thr Glu Ser Tyr Val Lys His Gln Gly Leu Asn Lys Asn Ile  
35 40 45  
Asn Leu Asp Ser Ala Asp Gly Met Pro Val Ala Ser Thr Asp Gln Trp  
50 55 60  
Ser Glu Leu Thr Glu Ala Glu Arg Leu Gln Glu Asn Leu Gln Ala Tyr  
65 70 75 80  
Arg Thr Phe His Val Leu Leu Ala Arg Leu Leu His Asp Gln Gln Val  
85 90 95  
His Phe Thr Pro Thr Glu Gly Asp Phe His Gln Ala Ile His Thr Leu  
100 105 110  
Leu Leu Gln Val Ala Ala Phe Ala Tyr Gln Ile Glu Glu Leu Met Ile  
115 120 125  
Leu Leu Glu Tyr Lys Ile Pro Arg Asn Glu Ala Asp Gly Met Pro Ile  
130 135 140  
Asn Val Gly Asp Gly Gly Leu Phe Glu Lys Lys Leu Trp Gly Leu Lys  
145 150 155 160  
Val Leu Gln Glu Leu Ser Gln Trp Thr Val Arg Ser Ile His Asp Leu





Asn	Val	Gly	Asp	Gly	Leu	Phe	Glu	Lys	Lys	Leu	Trp	Gly	Lys
145				150					155				160
Val	Leu	Gln	Glu	Leu	Ser	Gln	Trp	Thr	Val	Arg	Ser	Ile	His
			165						170				175
Arg	Phe	Ile	Ser	Ser	His	Gln	Thr	Gly	Ile	Pro	Ala	Arg	Gly
			180					185					190
Tyr	Ile	Ala	Asn	Asn	Lys	Lys	Met						
		195					200						

<210> 702  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 702

Met	Ala	Phe	Thr	Glu	His	Ser	Pro	Leu	Thr	Pro	His	Arg	Arg	Asp	Leu
1				5					10					15	
Cys	Ser	Arg	Ser	Ile	Trp	Leu	Ala	Arg	Lys	Ile	Arg	Ser	Asp	Leu	Thr
			20					25					30		
Ala	Leu	Thr	Glu	Ser	Tyr	Val	Lys	His	Gln	Gly	Leu	Asn	Lys	Asn	Ile
		35					40					45			
Asn	Leu	Asp	Ser	Ala	Asp	Gly	Met	Pro	Val	Ala	Ser	Thr	Asp	Gln	Trp
		50				55					60				
Ser	Glu	Leu	Thr	Glu	Ala	Glu	Arg	Leu	Gln	Glu	Asn	Leu	Gln	Ala	Tyr
65				70					75						80
Arg	Thr	Phe	His	Val	Leu	Leu	Ala	Arg	Leu	Leu	Glu	Asp	Gln	Gln	Val
				85					90					95	
His	Phe	Thr	Pro	Thr	Gln	Gly	Asp	Phe	His	Gln	Ala	Ile	His	Thr	Leu
			100					105					110		
Leu	Leu	Gln	Val	Ala	Ala	Phe	Ala	Tyr	Gln	Ile	Glu	Glu	Leu	Met	Ile
		115					120					125			
Leu	Leu	Glu	Tyr	Lys	Ile	Pro	Arg	Asn	Glu	Ala	Asp	Gly	Met	Pro	Ile
		130				135					140				
Asn	Val	Gly	Asp	Gly	Gly	Leu	Phe	Glu	Lys	Lys	Leu	Trp	Gly	Leu	Lys
145					150					155					160
Val	Leu	Gln	Glu	Leu	Ser	Gln	Trp	Thr	Val	Arg	Ser	Ile	His	Asp	Leu
				165					170					175	
Arg	Phe	Ile	Ser	Ser	His	Gln	Thr	Gly	Ile	Pro	Ala	Arg	Gly	Ser	His
			180					185						190	
Tyr	Ile	Ala	Asn	Asn	Lys	Lys	Met								
		195					200								

<210> 703  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 703

Met	Ala	Phe	Thr	Glu	His	Ser	Pro	Leu	Thr	Pro	His	Arg	Arg	Asp	Leu
1				5					10					15	
Cys	Ser	Arg	Ser	Ile	Trp	Leu	Ala	Arg	Lys	Ile	Arg	Ser	Asp	Leu	Thr
			20					25					30		
Ala	Leu	Thr	Glu	Ser	Tyr	Val	Lys	His	Gln	Gly	Leu	Asn	Lys	Asn	Ile
		35					40					45			
Asn	Leu	Asp	Ser	Ala	Asp	Gly	Met	Pro	Val	Ala	Ser	Thr	Asp	Gln	Trp
		50				55					60				
Ser	Glu	Leu	Thr	Glu	Ala	Glu	Arg	Leu	Gln	Glu	Asn	Leu	Gln	Ala	Tyr
65				70					75						80
Arg	Thr	Phe	His	Val	Leu	Leu	Ala	Arg	Leu	Leu	Glu	Asp	Gln	Gln	Val
				85					90					95	
His	Phe	Thr	Pro	Thr	Asn	Gly	Asp	Phe	His	Gln	Ala	Ile	His	Thr	Leu
			100					105					110		
Leu	Leu	Gln	Val	Ala	Ala	Phe	Ala	Tyr	Gln	Ile	Glu	Glu	Leu	Met	Ile

115	120	125
Leu Leu Glu Tyr Lys Ile	Pro Arg Asn Glu Ala Asp Gly Met Pro Ile	
130	135	140
Asn Val Gly Asp Gly Gly	Leu Phe Glu Lys Lys Leu Trp Gly Leu Lys	
145	150	155
Val Leu Gln Glu Leu Ser	Gln Trp Thr Val Arg Ser Ile His Asp Leu	
165	170	175
Arg Phe Ile Ser Ser His	Gln Thr Gly Ile Pro Ala Arg Gly Ser His	
180	185	190
Tyr Ile Ala Asn Asn Lys	Lys Met	
195	200	

<210> 704  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 704

Met Ala Phe Thr Glu His Ser Pro Leu Thr Pro His Arg Arg Asp Leu	
1 5 10 15	
Cys Ser Arg Ser Ile Trp Leu Ala Arg Lys Ile Arg Ser Asp Leu Thr	
20 25 30	
Ala Leu Thr Glu Ser Tyr Val Lys His Gln Gly Leu Asn Lys Asn Ile	
35 40 45	
Asn Leu Asp Ser Ala Asp Gly Met Pro Val Ala Ser Thr Asp Gln Trp	
50 55 60	
Ser Glu Leu Thr Glu Ala Glu Arg Leu Gln Glu Asn Leu Gln Ala Tyr	
65 70 75 80	
Arg Thr Phe His Val Leu Leu Ala Arg Leu Leu Glu Asp Gln Gln Val	
85 90 95	
His Phe Thr Pro Thr His Gly Asp Phe His Gln Ala Ile His Thr Leu	
100 105 110	
Leu Leu Gln Val Ala Ala Phe Ala Tyr Gln Ile Glu Glu Leu Met Ile	
115 120 125	
Leu Leu Glu Tyr Lys Ile Pro Arg Asn Glu Ala Asp Gly Met Pro Ile	
130 135 140	
Asn Val Gly Asp Gly Gly Leu Phe Glu Lys Lys Leu Trp Gly Leu Lys	
145 150 155 160	
Val Leu Gln Glu Leu Ser Gln Trp Thr Val Arg Ser Ile His Asp Leu	
165 170 175	
Arg Phe Ile Ser Ser His Gln Thr Gly Ile Pro Ala Arg Gly Ser His	
180 185 190	
Tyr Ile Ala Asn Asn Lys Lys Met	
195 200	

<210> 705  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 705

Met Ala Phe Thr Glu His Ser Pro Leu Thr Pro His Arg Arg Asp Leu	
1 5 10 15	
Cys Ser Arg Ser Ile Trp Leu Ala Arg Lys Ile Arg Ser Asp Leu Thr	
20 25 30	
Ala Leu Thr Glu Ser Tyr Val Lys His Gln Gly Leu Asn Lys Asn Ile	
35 40 45	
Asn Leu Asp Ser Ala Asp Gly Met Pro Val Ala Ser Thr Asp Gln Trp	
50 55 60	
Ser Glu Leu Thr Glu Ala Glu Arg Leu Gln Glu Asn Leu Gln Ala Tyr	
65 70 75 80	
Arg Thr Phe His Val Leu Leu Ala Arg Leu Leu Glu Asp Gln Gln Val	
85 90 95	

His	Phe	Thr	Pro	Thr		Gly	Gln	Phe	His	Gln	Ala	Ile	His		Leu
			100						105				110		
Leu	Leu	Gln	Val	Ala	Ala	Phe	Ala	Tyr	Gln	Ile	Glu	Glu	Leu	Met	Ile
		115					120					125			
Leu	Leu	Glu	Tyr	Lys	Ile	Pro	Arg	Asn	Glu	Ala	Asp	Gly	Met	Pro	Ile
		130				135					140				
Asn	Val	Gly	Asp	Gly	Gly	Leu	Phe	Glu	Lys	Lys	Leu	Trp	Gly	Leu	Lys
145					150					155					160
Val	Leu	Gln	Glu	Leu	Ser	Gln	Trp	Thr	Val	Arg	Ser	Ile	His	Asp	Leu
				165				170						175	
Arg	Phe	Ile	Ser	Ser	His	Gln	Thr	Gly	Ile	Pro	Ala	Arg	Gly	Ser	His
		180						185					190		
Tyr	Ile	Ala	Asn	Asn	Lys	Lys	Met								
		195					200								

<210> 706  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 706															
Met	Ala	Phe	Thr	Glu	His	Ser	Pro	Leu	Thr	Pro	His	Arg	Arg	Asp	Leu
1				5					10					15	
Cys	Ser	Arg	Ser	Ile	Trp	Leu	Ala	Arg	Lys	Ile	Arg	Ser	Asp	Leu	Thr
		20						25					30		
Ala	Leu	Thr	Glu	Ser	Tyr	Val	Lys	His	Gln	Gly	Leu	Asn	Lys	Asn	Ile
		35					40					45			
Asn	Leu	Asp	Ser	Ala	Asp	Gly	Met	Pro	Val	Ala	Ser	Thr	Asp	Gln	Trp
	50					55					60				
Ser	Glu	Leu	Thr	Glu	Ala	Glu	Arg	Leu	Gln	Glu	Asn	Leu	Gln	Ala	Tyr
65				70					75						80
Arg	Thr	Phe	His	Val	Leu	Leu	Ala	Arg	Leu	Leu	Glu	Asp	Gln	Gln	Val
			85					90						95	
His	Phe	Thr	Pro	Thr	Glu	Gly	Asn	Phe	His	Gln	Ala	Ile	His	Thr	Leu
			100					105					110		
Leu	Leu	Gln	Val	Ala	Ala	Phe	Ala	Tyr	Gln	Ile	Glu	Glu	Leu	Met	Ile
		115					120					125			
Leu	Leu	Glu	Tyr	Lys	Ile	Pro	Arg	Asn	Glu	Ala	Asp	Gly	Met	Pro	Ile
		130				135					140				
Asn	Val	Gly	Asp	Gly	Gly	Leu	Phe	Glu	Lys	Lys	Leu	Trp	Gly	Leu	Lys
145					150					155					160
Val	Leu	Gln	Glu	Leu	Ser	Gln	Trp	Thr	Val	Arg	Ser	Ile	His	Asp	Leu
				165				170						175	
Arg	Phe	Ile	Ser	Ser	His	Gln	Thr	Gly	Ile	Pro	Ala	Arg	Gly	Ser	His
		180						185					190		
Tyr	Ile	Ala	Asn	Asn	Lys	Lys	Met								
		195					200								

<210> 707  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 707															
Met	Ala	Phe	Thr	Glu	His	Ser	Pro	Leu	Thr	Pro	His	Arg	Arg	Asp	Leu
1				5					10					15	
Cys	Ser	Arg	Ser	Ile	Trp	Leu	Ala	Arg	Lys	Ile	Arg	Ser	Asp	Leu	Thr
		20						25					30		
Ala	Leu	Thr	Glu	Ser	Tyr	Val	Lys	His	Gln	Gly	Leu	Asn	Lys	Asn	Ile
		35					40					45			
Asn	Leu	Asp	Ser	Ala	Asp	Gly	Met	Pro	Val	Ala	Ser	Thr	Asp	Gln	Trp
	50					55					60				
Ser	Glu	Leu	Thr	Glu	Ala	Glu	Arg	Leu	Gln	Glu	Asn	Leu	Gln	Ala	Tyr

65	Arg	Thr	Phe	His	Val	Leu	Leu	Ala	Arg	Leu	Leu	Glu	Asp	Gln	Gln	Val	80
					85					90							95
	His	Phe	Thr	Pro	Thr	Glu	Gly	Asp	Phe	His	Gln	Ala	Ile	His	Thr	Leu	
				100					105					110			
	Leu	Leu	Gln	Val	Ala	Ala	Phe	Ala	Tyr	Gln	Ile	Glu	Glu	Leu	Met	Ile	
			115					120					125				
	Leu	Leu	Gln	Tyr	Lys	Ile	Pro	Arg	Asn	Glu	Ala	Asp	Gly	Met	Pro	Ile	
			130				135					140					
	Asn	Val	Gly	Asp	Gly	Gly	Leu	Phe	Glu	Lys	Lys	Leu	Trp	Gly	Leu	Lys	
			145			150					155					160	
	Val	Leu	Gln	Glu	Leu	Ser	Gln	Trp	Thr	Val	Arg	Ser	Ile	His	Asp	Leu	
					165					170					175		
	Arg	Phe	Ile	Ser	Ser	His	Gln	Thr	Gly	Ile	Pro	Ala	Arg	Gly	Ser	His	
			180						185					190			
	Tyr	Ile	Ala	Asn	Asn	Lys	Lys	Met									
			195					200									

<210> 708  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 708	Met	Ala	Phe	Thr	Glu	His	Ser	Pro	Leu	Thr	Pro	His	Arg	Arg	Asp	Leu	
	1				5					10					15		
	Cys	Ser	Arg	Ser	Ile	Trp	Leu	Ala	Arg	Lys	Ile	Arg	Ser	Asp	Leu	Thr	
				20					25					30			
	Ala	Leu	Thr	Glu	Ser	Tyr	Val	Lys	His	Gln	Gly	Leu	Asn	Lys	Asn	Ile	
			35				40						45				
	Asn	Leu	Asp	Ser	Ala	Asp	Gly	Met	Pro	Val	Ala	Ser	Thr	Asp	Gln	Trp	
			50			55						60					
	Ser	Glu	Leu	Thr	Glu	Ala	Glu	Arg	Leu	Gln	Glu	Asn	Leu	Gln	Ala	Tyr	
			65			70				75					80		
	Arg	Thr	Phe	His	Val	Leu	Leu	Ala	Arg	Leu	Leu	Glu	Asp	Gln	Gln	Val	
					85				90						95		
	His	Phe	Thr	Pro	Thr	Glu	Gly	Asp	Phe	His	Gln	Ala	Ile	His	Thr	Leu	
				100					105					110			
	Leu	Leu	Gln	Val	Ala	Ala	Phe	Ala	Tyr	Gln	Ile	Glu	Glu	Leu	Met	Ile	
			115					120					125				
	Leu	Leu	Asn	Tyr	Lys	Ile	Pro	Arg	Asn	Glu	Ala	Asp	Gly	Met	Pro	Ile	
			130				135					140					
	Asn	Val	Gly	Asp	Gly	Gly	Leu	Phe	Glu	Lys	Lys	Leu	Trp	Gly	Leu	Lys	
			145			150					155					160	
	Val	Leu	Gln	Glu	Leu	Ser	Gln	Trp	Thr	Val	Arg	Ser	Ile	His	Asp	Leu	
					165					170					175		
	Arg	Phe	Ile	Ser	Ser	His	Gln	Thr	Gly	Ile	Pro	Ala	Arg	Gly	Ser	His	
			180						185					190			
	Tyr	Ile	Ala	Asn	Asn	Lys	Lys	Met									
			195					200									

<210> 709  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 709	Met	Ala	Phe	Thr	Glu	His	Ser	Pro	Leu	Thr	Pro	His	Arg	Arg	Asp	Leu	
	1				5					10					15		
	Cys	Ser	Arg	Ser	Ile	Trp	Leu	Ala	Arg	Lys	Ile	Arg	Ser	Asp	Leu	Thr	
				20					25					30			
	Ala	Leu	Thr	Glu	Ser	Tyr	Val	Lys	His	Gln	Gly	Leu	Asn	Lys	Asn	Ile	
			35					40					45				

Asn	Leu	Asp	Ser	Ala		Gly	Met	Pro	Val	Ala	Ser	Thr	Asp		Trp
50						55					60				
Ser	Glu	Leu	Thr	Glu	Ala	Glu	Arg	Leu	Gln	Glu	Asn	Leu	Gln	Ala	Tyr
65					70					75					80
Arg	Thr	Phe	His	Val	Leu	Leu	Ala	Arg	Leu	Leu	Glu	Asp	Gln	Gln	Val
				85					90					95	
His	Phe	Thr	Pro	Thr	Glu	Gly	Asp	Phe	His	Gln	Ala	Ile	His	Thr	Leu
			100					105					110		
Leu	Leu	Gln	Val	Ala	Ala	Phe	Ala	Tyr	Gln	Ile	Glu	Glu	Leu	Met	Ile
		115					120					125			
Leu	Leu	His	Tyr	Lys	Ile	Pro	Arg	Asn	Glu	Ala	Asp	Gly	Met	Pro	Ile
		130				135					140				
Asn	Val	Gly	Asp	Gly	Gly	Leu	Phe	Glu	Lys	Lys	Leu	Trp	Gly	Leu	Lys
145				150						155					160
Val	Leu	Gln	Glu	Leu	Ser	Gln	Trp	Thr	Val	Arg	Ser	Ile	His	Asp	Leu
				165				170						175	
Arg	Phe	Ile	Ser	Ser	His	Gln	Thr	Gly	Ile	Pro	Ala	Arg	Gly	Ser	His
			180					185					190		
Tyr	Ile	Ala	Asn	Asn	Lys	Lys	Met								
		195					200								

<210> 710  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

Met	Ala	Phe	Thr	Glu	His	Ser	Pro	Leu	Thr	Pro	His	Arg	Arg	Asp	Leu
1				5					10					15	
Cys	Ser	Arg	Ser	Ile	Trp	Leu	Ala	Arg	Lys	Ile	Arg	Ser	Asp	Leu	Thr
			20					25					30		
Ala	Leu	Thr	Glu	Ser	Tyr	Val	Lys	His	Gln	Gly	Leu	Asn	Lys	Asn	Ile
		35				40						45			
Asn	Leu	Asp	Ser	Ala	Asp	Gly	Met	Pro	Val	Ala	Ser	Thr	Asp	Gln	Trp
		50				55					60				
Ser	Glu	Leu	Thr	Glu	Ala	Glu	Arg	Leu	Gln	Glu	Asn	Leu	Gln	Ala	Tyr
65				70						75					80
Arg	Thr	Phe	His	Val	Leu	Leu	Ala	Arg	Leu	Leu	Glu	Asp	Gln	Gln	Val
				85					90					95	
His	Phe	Thr	Pro	Thr	Glu	Gly	Asp	Phe	His	Gln	Ala	Ile	His	Thr	Leu
			100					105					110		
Leu	Leu	Gln	Val	Ala	Ala	Phe	Ala	Tyr	Gln	Ile	Glu	Glu	Leu	Met	Ile
		115					120					125			
Leu	Leu	Glu	His	Lys	Ile	Pro	Arg	Asn	Glu	Ala	Asp	Gly	Met	Pro	Ile
		130				135					140				
Asn	Val	Gly	Asp	Gly	Gly	Leu	Phe	Glu	Lys	Lys	Leu	Trp	Gly	Leu	Lys
145				150						155					160
Val	Leu	Gln	Glu	Leu	Ser	Gln	Trp	Thr	Val	Arg	Ser	Ile	His	Asp	Leu
				165				170						175	
Arg	Phe	Ile	Ser	Ser	His	Gln	Thr	Gly	Ile	Pro	Ala	Arg	Gly	Ser	His
			180					185					190		
Tyr	Ile	Ala	Asn	Asn	Lys	Lys	Met								
		195					200								

<210> 711  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

Met	Ala	Phe	Thr	Glu	His	Ser	Pro	Leu	Thr	Pro	His	Arg	Arg	Asp	Leu
1				5					10					15	
Cys	Ser	Arg	Ser	Ile	Trp	Leu	Ala	Arg	Lys	Ile	Arg	Ser	Asp	Leu	Thr

Ala	Leu	Thr	Glu	Ser	Tyr	Val	Lys	His	Gln	Gly	Leu	Asn	Lys	Asn	Ile
	35						40					45			
Asn	Leu	Asp	Ser	Ala	Asp	Gly	Met	Pro	Val	Ala	Ser	Thr	Asp	Gln	Trp
	50					55					60				
Ser	Glu	Leu	Thr	Glu	Ala	Glu	Arg	Leu	Gln	Glu	Asn	Leu	Gln	Ala	Tyr
65					70					75					80
Arg	Thr	Phe	His	Val	Leu	Leu	Ala	Arg	Leu	Leu	Glu	Asp	Gln	Gln	Val
			85						90					95	
His	Phe	Thr	Pro	Thr	Glu	Gly	Asp	Phe	His	Gln	Ala	Ile	His	Thr	Leu
			100					105					110		
Leu	Leu	Gln	Val	Ala	Ala	Phe	Ala	Tyr	Gln	Ile	Glu	Glu	Leu	Met	Ile
	115						120					125			
Leu	Leu	Glu	Ile	Lys	Ile	Pro	Arg	Asn	Glu	Ala	Asp	Gly	Met	Pro	Ile
	130					135					140				
Asn	Val	Gly	Asp	Gly	Gly	Leu	Phe	Glu	Lys	Lys	Leu	Trp	Gly	Leu	Lys
145					150					155					160
Val	Leu	Gln	Glu	Leu	Ser	Gln	Trp	Thr	Val	Arg	Ser	Ile	His	Asp	Leu
				165					170					175	
Arg	Phe	Ile	Ser	Ser	His	Gln	Thr	Gly	Ile	Pro	Ala	Arg	Gly	Ser	His
			180					185						190	
Tyr	Ile	Ala	Asn	Asn	Lys	Lys	Met								
	195						200								

<210> 712  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

Met	Ala	Phe	Thr	Glu	His	Ser	Pro	Leu	Thr	Pro	His	Arg	Arg	Asp	Leu
1				5					10					15	
Cys	Ser	Arg	Ser	Ile	Trp	Leu	Ala	Arg	Lys	Ile	Arg	Ser	Asp	Leu	Thr
		20					25					30			
Ala	Leu	Thr	Glu	Ser	Tyr	Val	Lys	His	Gln	Gly	Leu	Asn	Lys	Asn	Ile
	35						40					45			
Asn	Leu	Asp	Ser	Ala	Asp	Gly	Met	Pro	Val	Ala	Ser	Thr	Asp	Gln	Trp
	50					55					60				
Ser	Glu	Leu	Thr	Glu	Ala	Glu	Arg	Leu	Gln	Glu	Asn	Leu	Gln	Ala	Tyr
65					70					75					80
Arg	Thr	Phe	His	Val	Leu	Leu	Ala	Arg	Leu	Leu	Glu	Asp	Gln	Gln	Val
			85						90					95	
His	Phe	Thr	Pro	Thr	Glu	Gly	Asp	Phe	His	Gln	Ala	Ile	His	Thr	Leu
			100					105					110		
Leu	Leu	Gln	Val	Ala	Ala	Phe	Ala	Tyr	Gln	Ile	Glu	Glu	Leu	Met	Ile
	115						120					125			
Leu	Leu	Glu	Tyr	Gln	Ile	Pro	Arg	Asn	Glu	Ala	Asp	Gly	Met	Pro	Ile
	130					135					140				
Asn	Val	Gly	Asp	Gly	Gly	Leu	Phe	Glu	Lys	Lys	Leu	Trp	Gly	Leu	Lys
145					150					155					160
Val	Leu	Gln	Glu	Leu	Ser	Gln	Trp	Thr	Val	Arg	Ser	Ile	His	Asp	Leu
				165					170					175	
Arg	Phe	Ile	Ser	Ser	His	Gln	Thr	Gly	Ile	Pro	Ala	Arg	Gly	Ser	His
			180					185						190	
Tyr	Ile	Ala	Asn	Asn	Lys	Lys	Met								
	195						200								

<210> 713  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 713

Met Ala Phe Thr Glu Ser Pro Leu Thr Pro His Arg Arg Leu  
1 5 10 15  
Cys Ser Arg Ser Ile Trp Leu Ala Arg Lys Ile Arg Ser Asp Leu Thr  
20 25 30  
Ala Leu Thr Glu Ser Tyr Val Lys His Gln Gly Leu Asn Lys Asn Ile  
35 40 45  
Asn Leu Asp Ser Ala Asp Gly Met Pro Val Ala Ser Thr Asp Gln Trp  
50 55 60  
Ser Glu Leu Thr Glu Ala Glu Arg Leu Gln Glu Asn Leu Gln Ala Tyr  
65 70 75 80  
Arg Thr Phe His Val Leu Leu Ala Arg Leu Leu Glu Asp Gln Gln Val  
85 90 95  
His Phe Thr Pro Thr Glu Gly Asp Phe His Gln Ala Ile His Thr Leu  
100 105 110  
Leu Leu Gln Val Ala Ala Phe Ala Tyr Gln Ile Glu Glu Leu Met Ile  
115 120 125  
Leu Leu Glu Tyr Asn Ile Pro Arg Asn Glu Ala Asp Gly Met Pro Ile  
130 135 140  
Asn Val Gly Asp Gly Gly Leu Phe Glu Lys Lys Leu Trp Gly Leu Lys  
145 150 155 160  
Val Leu Gln Glu Leu Ser Gln Trp Thr Val Arg Ser Ile His Asp Leu  
165 170 175  
Arg Phe Ile Ser Ser His Gln Thr Gly Ile Pro Ala Arg Gly Ser His  
180 185 190  
Tyr Ile Ala Asn Asn Lys Lys Met  
195 200

<210> 714  
<211> 200  
<212> PRT  
<213> Homo sapiens

<400> 714  
Met Ala Phe Thr Glu His Ser Pro Leu Thr Pro His Arg Arg Asp Leu  
1 5 10 15  
Cys Ser Arg Ser Ile Trp Leu Ala Arg Lys Ile Arg Ser Asp Leu Thr  
20 25 30  
Ala Leu Thr Glu Ser Tyr Val Lys His Gln Gly Leu Asn Lys Asn Ile  
35 40 45  
Asn Leu Asp Ser Ala Asp Gly Met Pro Val Ala Ser Thr Asp Gln Trp  
50 55 60  
Ser Glu Leu Thr Glu Ala Glu Arg Leu Gln Glu Asn Leu Gln Ala Tyr  
65 70 75 80  
Arg Thr Phe His Val Leu Leu Ala Arg Leu Leu Glu Asp Gln Gln Val  
85 90 95  
His Phe Thr Pro Thr Glu Gly Asp Phe His Gln Ala Ile His Thr Leu  
100 105 110  
Leu Leu Gln Val Ala Ala Phe Ala Tyr Gln Ile Glu Glu Leu Met Ile  
115 120 125  
Leu Leu Glu Tyr Lys Ile Ser Arg Asn Glu Ala Asp Gly Met Pro Ile  
130 135 140  
Asn Val Gly Asp Gly Gly Leu Phe Glu Lys Lys Leu Trp Gly Leu Lys  
145 150 155 160  
Val Leu Gln Glu Leu Ser Gln Trp Thr Val Arg Ser Ile His Asp Leu  
165 170 175  
Arg Phe Ile Ser Ser His Gln Thr Gly Ile Pro Ala Arg Gly Ser His  
180 185 190  
Tyr Ile Ala Asn Asn Lys Lys Met  
195 200

<210> 715  
<211> 200  
<212> PRT

<213> Homo sapiens

<400> 715

```
Met Ala Phe Thr Glu His Ser Pro Leu Thr Pro His Arg Arg Asp Leu
 1          5          10          15
Cys Ser Arg Ser Ile Trp Leu Ala Arg Lys Ile Arg Ser Asp Leu Thr
      20          25          30
Ala Leu Thr Glu Ser Tyr Val Lys His Gln Gly Leu Asn Lys Asn Ile
      35          40          45
Asn Leu Asp Ser Ala Asp Gly Met Pro Val Ala Ser Thr Asp Gln Trp
      50          55          60
Ser Glu Leu Thr Glu Ala Glu Arg Leu Gln Glu Asn Leu Gln Ala Tyr
      65          70          75          80
Arg Thr Phe His Val Leu Leu Ala Arg Leu Leu Glu Asp Gln Gln Val
      85          90          95
His Phe Thr Pro Thr Glu Gly Asp Phe His Gln Ala Ile His Thr Leu
      100          105          110
Leu Leu Gln Val Ala Ala Phe Ala Tyr Gln Ile Glu Glu Leu Met Ile
      115          120          125
Leu Leu Glu Tyr Lys Ile Ala Arg Asn Glu Ala Asp Gly Met Pro Ile
      130          135          140
Asn Val Gly Asp Gly Gly Leu Phe Glu Lys Lys Leu Trp Gly Leu Lys
      145          150          155          160
Val Leu Gln Glu Leu Ser Gln Trp Thr Val Arg Ser Ile His Asp Leu
      165          170          175
Arg Phe Ile Ser Ser His Gln Thr Gly Ile Pro Ala Arg Gly Ser His
      180          185          190
Tyr Ile Ala Asn Asn Lys Lys Met
      195          200
```

<210> 716

<211> 200

<212> PRT

<213> Homo sapiens

<400> 716

```
Met Ala Phe Thr Glu His Ser Pro Leu Thr Pro His Arg Arg Asp Leu
 1          5          10          15
Cys Ser Arg Ser Ile Trp Leu Ala Arg Lys Ile Arg Ser Asp Leu Thr
      20          25          30
Ala Leu Thr Glu Ser Tyr Val Lys His Gln Gly Leu Asn Lys Asn Ile
      35          40          45
Asn Leu Asp Ser Ala Asp Gly Met Pro Val Ala Ser Thr Asp Gln Trp
      50          55          60
Ser Glu Leu Thr Glu Ala Glu Arg Leu Gln Glu Asn Leu Gln Ala Tyr
      65          70          75          80
Arg Thr Phe His Val Leu Leu Ala Arg Leu Leu Glu Asp Gln Gln Val
      85          90          95
His Phe Thr Pro Thr Glu Gly Asp Phe His Gln Ala Ile His Thr Leu
      100          105          110
Leu Leu Gln Val Ala Ala Phe Ala Tyr Gln Ile Glu Glu Leu Met Ile
      115          120          125
Leu Leu Glu Tyr Lys Ile Pro His Asn Glu Ala Asp Gly Met Pro Ile
      130          135          140
Asn Val Gly Asp Gly Gly Leu Phe Glu Lys Lys Leu Trp Gly Leu Lys
      145          150          155          160
Val Leu Gln Glu Leu Ser Gln Trp Thr Val Arg Ser Ile His Asp Leu
      165          170          175
Arg Phe Ile Ser Ser His Gln Thr Gly Ile Pro Ala Arg Gly Ser His
      180          185          190
Tyr Ile Ala Asn Asn Lys Lys Met
      195          200
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<210> 717  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 717  
 Met Ala Phe Thr Glu His Ser Pro Leu Thr Pro His Arg Arg Asp Leu  
 1 5 10 15  
 Cys Ser Arg Ser Ile Trp Leu Ala Arg Lys Ile Arg Ser Asp Leu Thr  
 20 25 30  
 Ala Leu Thr Glu Ser Tyr Val Lys His Gln Gly Leu Asn Lys Asn Ile  
 35 40 45  
 Asn Leu Asp Ser Ala Asp Gly Met Pro Val Ala Ser Thr Asp Gln Trp  
 50 55 60  
 Ser Glu Leu Thr Glu Ala Glu Arg Leu Gln Glu Asn Leu Gln Ala Tyr  
 65 70 75 80  
 Arg Thr Phe His Val Leu Leu Ala Arg Leu Leu Glu Asp Gln Gln Val  
 85 90 95  
 His Phe Thr Pro Thr Glu Gly Asp Phe His Gln Ala Ile His Thr Leu  
 100 105 110  
 Leu Leu Gln Val Ala Ala Phe Ala Tyr Gln Ile Glu Glu Leu Met Ile  
 115 120 125  
 Leu Leu Glu Tyr Lys Ile Pro Gln Asn Glu Ala Asp Gly Met Pro Ile  
 130 135 140  
 Asn Val Gly Asp Gly Gly Leu Phe Glu Lys Lys Leu Trp Gly Leu Lys  
 145 150 155 160  
 Val Leu Gln Glu Leu Ser Gln Trp Thr Val Arg Ser Ile His Asp Leu  
 165 170 175  
 Arg Phe Ile Ser Ser His Gln Thr Gly Ile Pro Ala Arg Gly Ser His  
 180 185 190  
 Tyr Ile Ala Asn Asn Lys Lys Met  
 195 200

<210> 718  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 718  
 Met Ala Phe Thr Glu His Ser Pro Leu Thr Pro His Arg Arg Asp Leu  
 1 5 10 15  
 Cys Ser Arg Ser Ile Trp Leu Ala Arg Lys Ile Arg Ser Asp Leu Thr  
 20 25 30  
 Ala Leu Thr Glu Ser Tyr Val Lys His Gln Gly Leu Asn Lys Asn Ile  
 35 40 45  
 Asn Leu Asp Ser Ala Asp Gly Met Pro Val Ala Ser Thr Asp Gln Trp  
 50 55 60  
 Ser Glu Leu Thr Glu Ala Glu Arg Leu Gln Glu Asn Leu Gln Ala Tyr  
 65 70 75 80  
 Arg Thr Phe His Val Leu Leu Ala Arg Leu Leu Glu Asp Gln Gln Val  
 85 90 95  
 His Phe Thr Pro Thr Glu Gly Asp Phe His Gln Ala Ile His Thr Leu  
 100 105 110  
 Leu Leu Gln Val Ala Ala Phe Ala Tyr Gln Ile Glu Glu Leu Met Ile  
 115 120 125  
 Leu Leu Glu Tyr Lys Ile Pro Arg Asn Gln Ala Asp Gly Met Pro Ile  
 130 135 140  
 Asn Val Gly Asp Gly Gly Leu Phe Glu Lys Lys Leu Trp Gly Leu Lys  
 145 150 155 160  
 Val Leu Gln Glu Leu Ser Gln Trp Thr Val Arg Ser Ile His Asp Leu  
 165 170 175  
 Arg Phe Ile Ser Ser His Gln Thr Gly Ile Pro Ala Arg Gly Ser His  
 180 185 190

Tyr Ile Ala Asn Asn Lys Met  
195 200

<210> 719  
<211> 200  
<212> PRT  
<213> Homo sapiens

<400> 719  
Met Ala Phe Thr Glu His Ser Pro Leu Thr Pro His Arg Arg Asp Leu  
1 5 10 15  
Cys Ser Arg Ser Ile Trp Leu Ala Arg Lys Ile Arg Ser Asp Leu Thr  
20 25 30  
Ala Leu Thr Glu Ser Tyr Val Lys His Gln Gly Leu Asn Lys Asn Ile  
35 40 45  
Asn Leu Asp Ser Ala Asp Gly Met Pro Val Ala Ser Thr Asp Gln Trp  
50 55 60  
Ser Glu Leu Thr Glu Ala Glu Arg Leu Gln Glu Asn Leu Gln Ala Tyr  
65 70 75 80  
Arg Thr Phe His Val Leu Leu Ala Arg Leu Leu Glu Asp Gln Gln Val  
85 90 95  
His Phe Thr Pro Thr Glu Gly Asp Phe His Gln Ala Ile His Thr Leu  
100 105 110  
Leu Leu Gln Val Ala Ala Phe Ala Tyr Gln Ile Glu Glu Leu Met Ile  
115 120 125  
Leu Leu Glu Tyr Lys Ile Pro Arg Asn Asn Ala Asp Gly Met Pro Ile  
130 135 140  
Asn Val Gly Asp Gly Gly Leu Phe Glu Lys Lys Leu Trp Gly Leu Lys  
145 150 155 160  
Val Leu Gln Glu Leu Ser Gln Trp Thr Val Arg Ser Ile His Asp Leu  
165 170 175  
Arg Phe Ile Ser Ser His Gln Thr Gly Ile Pro Ala Arg Gly Ser His  
180 185 190  
Tyr Ile Ala Asn Asn Lys Lys Met  
195 200

<210> 720  
<211> 200  
<212> PRT  
<213> Homo sapiens

<400> 720  
Met Ala Phe Thr Glu His Ser Pro Leu Thr Pro His Arg Arg Asp Leu  
1 5 10 15  
Cys Ser Arg Ser Ile Trp Leu Ala Arg Lys Ile Arg Ser Asp Leu Thr  
20 25 30  
Ala Leu Thr Glu Ser Tyr Val Lys His Gln Gly Leu Asn Lys Asn Ile  
35 40 45  
Asn Leu Asp Ser Ala Asp Gly Met Pro Val Ala Ser Thr Asp Gln Trp  
50 55 60  
Ser Glu Leu Thr Glu Ala Glu Arg Leu Gln Glu Asn Leu Gln Ala Tyr  
65 70 75 80  
Arg Thr Phe His Val Leu Leu Ala Arg Leu Leu Glu Asp Gln Gln Val  
85 90 95  
His Phe Thr Pro Thr Glu Gly Asp Phe His Gln Ala Ile His Thr Leu  
100 105 110  
Leu Leu Gln Val Ala Ala Phe Ala Tyr Gln Ile Glu Glu Leu Met Ile  
115 120 125  
Leu Leu Glu Tyr Lys Ile Pro Arg Asn His Ala Asp Gly Met Pro Ile  
130 135 140  
Asn Val Gly Asp Gly Gly Leu Phe Glu Lys Lys Leu Trp Gly Leu Lys  
145 150 155 160  
Val Leu Gln Glu Leu Ser Gln Trp Thr Val Arg Ser Ile His Asp Leu

Arg	Phe	Ile	Ser	His	Gln	Thr	Gly	Ile	Pro	Ala	Arg	Gly	Ser	His
			180				185					190		
Tyr	Ile	Ala	Asn	Asn	Lys	Lys	Met							
			195				200							

<210> 721  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 721

Met	Ala	Phe	Thr	Glu	His	Ser	Pro	Leu	Thr	Pro	His	Arg	Arg	Asp	Leu
1				5					10					15	
Cys	Ser	Arg	Ser	Ile	Trp	Leu	Ala	Arg	Lys	Ile	Arg	Ser	Asp	Leu	Thr
			20					25					30		
Ala	Leu	Thr	Glu	Ser	Tyr	Val	Lys	His	Gln	Gly	Leu	Asn	Lys	Asn	Ile
			35				40					45			
Asn	Leu	Asp	Ser	Ala	Asp	Gly	Met	Pro	Val	Ala	Ser	Thr	Asp	Gln	Trp
	50					55					60				
Ser	Glu	Leu	Thr	Glu	Ala	Glu	Arg	Leu	Gln	Glu	Asn	Leu	Gln	Ala	Tyr
65					70					75					80
Arg	Thr	Phe	His	Val	Leu	Leu	Ala	Arg	Leu	Leu	Glu	Asp	Gln	Gln	Val
				85					90					95	
His	Phe	Thr	Pro	Thr	Glu	Gly	Asp	Phe	His	Gln	Ala	Ile	His	Thr	Leu
			100					105					110		
Leu	Leu	Gln	Val	Ala	Ala	Phe	Ala	Tyr	Gln	Ile	Glu	Glu	Leu	Met	Ile
			115				120					125			
Leu	Leu	Glu	Tyr	Lys	Ile	Pro	Arg	Asn	Glu	Ala	Gln	Gly	Met	Pro	Ile
			130				135				140				
Asn	Val	Gly	Asp	Gly	Gly	Leu	Phe	Glu	Lys	Lys	Leu	Trp	Gly	Leu	Lys
145					150					155					160
Val	Leu	Gln	Glu	Leu	Ser	Gln	Trp	Thr	Val	Arg	Ser	Ile	His	Asp	Leu
					165				170					175	
Arg	Phe	Ile	Ser	Ser	His	Gln	Thr	Gly	Ile	Pro	Ala	Arg	Gly	Ser	His
			180					185					190		
Tyr	Ile	Ala	Asn	Asn	Lys	Lys	Met								
			195				200								

<210> 722  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 722

Met	Ala	Phe	Thr	Glu	His	Ser	Pro	Leu	Thr	Pro	His	Arg	Arg	Asp	Leu
1				5					10					15	
Cys	Ser	Arg	Ser	Ile	Trp	Leu	Ala	Arg	Lys	Ile	Arg	Ser	Asp	Leu	Thr
			20					25					30		
Ala	Leu	Thr	Glu	Ser	Tyr	Val	Lys	His	Gln	Gly	Leu	Asn	Lys	Asn	Ile
			35				40					45			
Asn	Leu	Asp	Ser	Ala	Asp	Gly	Met	Pro	Val	Ala	Ser	Thr	Asp	Gln	Trp
	50					55					60				
Ser	Glu	Leu	Thr	Glu	Ala	Glu	Arg	Leu	Gln	Glu	Asn	Leu	Gln	Ala	Tyr
65					70					75					80
Arg	Thr	Phe	His	Val	Leu	Leu	Ala	Arg	Leu	Leu	Glu	Asp	Gln	Gln	Val
				85					90					95	
His	Phe	Thr	Pro	Thr	Glu	Gly	Asp	Phe	His	Gln	Ala	Ile	His	Thr	Leu
			100					105					110		
Leu	Leu	Gln	Val	Ala	Ala	Phe	Ala	Tyr	Gln	Ile	Glu	Glu	Leu	Met	Ile
			115				120					125			
Leu	Leu	Glu	Tyr	Lys	Ile	Pro	Arg	Asn	Glu	Ala	Asn	Gly	Met	Pro	Ile
			130				135					140			

Asn	Val	Gly	Asp	Gly	Leu	Phe	Glu	Lys	Lys	Leu	Trp	Gly	Lys
145				150					155				160
Val	Leu	Gln	Glu	Leu	Ser	Gln	Trp	Thr	Val	Arg	Ser	Ile	His
		165						170				175	Asp
Arg	Phe	Ile	Ser	Ser	His	Gln	Thr	Gly	Ile	Pro	Ala	Arg	Gly
		180						185				190	Ser
Tyr	Ile	Ala	Asn	Asn	Lys	Lys	Met						His
		195					200						

<210> 723  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

Met	Ala	Phe	Thr	Glu	His	Ser	Pro	Leu	Thr	Pro	His	Arg	Arg	Asp	Leu
1				5					10					15	
Cys	Ser	Arg	Ser	Ile	Trp	Leu	Ala	Arg	Lys	Ile	Arg	Ser	Asp	Leu	Thr
		20						25					30		
Ala	Leu	Thr	Glu	Ser	Tyr	Val	Lys	His	Gln	Gly	Leu	Asn	Lys	Asn	Ile
		35					40					45			
Asn	Leu	Asp	Ser	Ala	Asp	Gly	Met	Pro	Val	Ala	Ser	Thr	Asp	Gln	Trp
		50				55					60				
Ser	Glu	Leu	Thr	Glu	Ala	Glu	Arg	Leu	Gln	Glu	Asn	Leu	Gln	Ala	Tyr
65				70					75					80	
Arg	Thr	Phe	His	Val	Leu	Leu	Ala	Arg	Leu	Leu	Glu	Asp	Gln	Gln	Val
			85						90					95	
His	Phe	Thr	Pro	Thr	Glu	Gly	Asp	Phe	His	Gln	Ala	Ile	His	Thr	Leu
			100					105					110		
Leu	Leu	Gln	Val	Ala	Ala	Phe	Ala	Tyr	Gln	Ile	Glu	Glu	Leu	Met	Ile
		115					120					125			
Leu	Leu	Glu	Tyr	Lys	Ile	Pro	Arg	Asn	Glu	Ala	Asp	Gly	Met	Ser	Ile
		130				135					140				
Asn	Val	Gly	Asp	Gly	Gly	Leu	Phe	Glu	Lys	Lys	Leu	Trp	Gly	Leu	Lys
145					150					155					160
Val	Leu	Gln	Glu	Leu	Ser	Gln	Trp	Thr	Val	Arg	Ser	Ile	His	Asp	Leu
			165						170					175	
Arg	Phe	Ile	Ser	Ser	His	Gln	Thr	Gly	Ile	Pro	Ala	Arg	Gly	Ser	His
		180						185					190		
Tyr	Ile	Ala	Asn	Asn	Lys	Lys	Met								
		195					200								

<210> 724  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

Met	Ala	Phe	Thr	Glu	His	Ser	Pro	Leu	Thr	Pro	His	Arg	Arg	Asp	Leu
1				5					10					15	
Cys	Ser	Arg	Ser	Ile	Trp	Leu	Ala	Arg	Lys	Ile	Arg	Ser	Asp	Leu	Thr
		20						25					30		
Ala	Leu	Thr	Glu	Ser	Tyr	Val	Lys	His	Gln	Gly	Leu	Asn	Lys	Asn	Ile
		35					40					45			
Asn	Leu	Asp	Ser	Ala	Asp	Gly	Met	Pro	Val	Ala	Ser	Thr	Asp	Gln	Trp
		50				55					60				
Ser	Glu	Leu	Thr	Glu	Ala	Glu	Arg	Leu	Gln	Glu	Asn	Leu	Gln	Ala	Tyr
65				70					75					80	
Arg	Thr	Phe	His	Val	Leu	Leu	Ala	Arg	Leu	Leu	Glu	Asp	Gln	Gln	Val
			85						90					95	
His	Phe	Thr	Pro	Thr	Glu	Gly	Asp	Phe	His	Gln	Ala	Ile	His	Thr	Leu
			100					105					110		
Leu	Leu	Gln	Val	Ala	Ala	Phe	Ala	Tyr	Gln	Ile	Glu	Glu	Leu	Met	Ile

115	120	125
Leu Leu Glu Tyr Lys Ile Pro Arg Asn Glu Ala Asp Gly Met Ala Ile		
130	135	140
Asn Val Gly Asp Gly Gly Leu Phe Glu Lys Lys Leu Trp Gly Leu Lys		
145	150	155
Val Leu Gln Glu Leu Ser Gln Trp Thr Val Arg Ser Ile His Asp Leu		
165	170	175
Arg Phe Ile Ser Ser His Gln Thr Gly Ile Pro Ala Arg Gly Ser His		
180	185	190
Tyr Ile Ala Asn Asn Lys Lys Met		
195	200	

<210> 725  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 725
Met Ala Phe Thr Glu His Ser Pro Leu Thr Pro His Arg Arg Asp Leu
1 5 10 15
Cys Ser Arg Ser Ile Trp Leu Ala Arg Lys Ile Arg Ser Asp Leu Thr
20 25 30
Ala Leu Thr Glu Ser Tyr Val Lys His Gln Gly Leu Asn Lys Asn Ile
35 40 45
Asn Leu Asp Ser Ala Asp Gly Met Pro Val Ala Ser Thr Asp Gln Trp
50 55 60
Ser Glu Leu Thr Glu Ala Glu Arg Leu Gln Glu Asn Leu Gln Ala Tyr
65 70 75 80
Arg Thr Phe His Val Leu Leu Ala Arg Leu Leu Glu Asp Gln Gln Val
85 90 95
His Phe Thr Pro Thr Glu Gly Asp Phe His Gln Ala Ile His Thr Leu
100 105 110
Leu Leu Gln Val Ala Ala Phe Ala Tyr Gln Ile Glu Glu Leu Met Ile
115 120 125
Leu Leu Glu Tyr Lys Ile Pro Arg Asn Glu Ala Asp Gly Met Pro Ile
130 135 140
Asn Val Gly Gln Gly Gly Leu Phe Glu Lys Lys Leu Trp Gly Leu Lys
145 150 155 160
Val Leu Gln Glu Leu Ser Gln Trp Thr Val Arg Ser Ile His Asp Leu
165 170 175
Arg Phe Ile Ser Ser His Gln Thr Gly Ile Pro Ala Arg Gly Ser His
180 185 190
Tyr Ile Ala Asn Asn Lys Lys Met
195 200

<210> 726  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 726
Met Ala Phe Thr Glu His Ser Pro Leu Thr Pro His Arg Arg Asp Leu
1 5 10 15
Cys Ser Arg Ser Ile Trp Leu Ala Arg Lys Ile Arg Ser Asp Leu Thr
20 25 30
Ala Leu Thr Glu Ser Tyr Val Lys His Gln Gly Leu Asn Lys Asn Ile
35 40 45
Asn Leu Asp Ser Ala Asp Gly Met Pro Val Ala Ser Thr Asp Gln Trp
50 55 60
Ser Glu Leu Thr Glu Ala Glu Arg Leu Gln Glu Asn Leu Gln Ala Tyr
65 70 75 80
Arg Thr Phe His Val Leu Leu Ala Arg Leu Leu Glu Asp Gln Gln Val
85 90 95

His	Phe	Thr	Pro	Thr		Gly	Asp	Phe	His	Gln	Ala	Ile	His		Leu
			100				105						110		
Leu	Leu	Gln	Val	Ala	Ala	Phe	Ala	Tyr	Gln	Ile	Glu	Glu	Leu	Met	Ile
		115					120					125			
Leu	Leu	Glu	Tyr	Lys	Ile	Pro	Arg	Asn	Glu	Ala	Asp	Gly	Met	Pro	Ile
		130				135					140				
Asn	Val	Gly	Asn	Gly	Gly	Leu	Phe	Glu	Lys	Lys	Leu	Trp	Gly	Leu	Lys
145					150					155					160
Val	Leu	Gln	Glu	Leu	Ser	Gln	Trp	Thr	Val	Arg	Ser	Ile	His	Asp	Leu
				165				170						175	
Arg	Phe	Ile	Ser	Ser	His	Gln	Thr	Gly	Ile	Pro	Ala	Arg	Gly	Ser	His
		180						185					190		
Tyr	Ile	Ala	Asn	Asn	Lys	Lys	Met								
		195					200								

<210> 727  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 727															
Met	Ala	Phe	Thr	Glu	His	Ser	Pro	Leu	Thr	Pro	His	Arg	Arg	Asp	Leu
1				5					10					15	
Cys	Ser	Arg	Ser	Ile	Trp	Leu	Ala	Arg	Lys	Ile	Arg	Ser	Asp	Leu	Thr
			20					25					30		
Ala	Leu	Thr	Glu	Ser	Tyr	Val	Lys	His	Gln	Gly	Leu	Asn	Lys	Asn	Ile
		35					40					45			
Asn	Leu	Asp	Ser	Ala	Asp	Gly	Met	Pro	Val	Ala	Ser	Thr	Asp	Gln	Trp
		50				55					60				
Ser	Glu	Leu	Thr	Glu	Ala	Glu	Arg	Leu	Gln	Glu	Asn	Leu	Gln	Ala	Tyr
65					70				75						80
Arg	Thr	Phe	His	Val	Leu	Leu	Ala	Arg	Leu	Leu	Glu	Asp	Gln	Gln	Val
				85				90						95	
His	Phe	Thr	Pro	Thr	Glu	Gly	Asp	Phe	His	Gln	Ala	Ile	His	Thr	Leu
			100					105					110		
Leu	Leu	Gln	Val	Ala	Ala	Phe	Ala	Tyr	Gln	Ile	Glu	Glu	Leu	Met	Ile
		115					120					125			
Leu	Leu	Glu	Tyr	Lys	Ile	Pro	Arg	Asn	Glu	Ala	Asp	Gly	Met	Pro	Ile
		130				135					140				
Asn	Val	Gly	Asp	Gly	Gly	Val	Phe	Glu	Lys	Lys	Leu	Trp	Gly	Leu	Lys
145					150					155					160
Val	Leu	Gln	Glu	Leu	Ser	Gln	Trp	Thr	Val	Arg	Ser	Ile	His	Asp	Leu
				165				170						175	
Arg	Phe	Ile	Ser	Ser	His	Gln	Thr	Gly	Ile	Pro	Ala	Arg	Gly	Ser	His
		180						185					190		
Tyr	Ile	Ala	Asn	Asn	Lys	Lys	Met								
		195					200								

<210> 728  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 728															
Met	Ala	Phe	Thr	Glu	His	Ser	Pro	Leu	Thr	Pro	His	Arg	Arg	Asp	Leu
1				5					10					15	
Cys	Ser	Arg	Ser	Ile	Trp	Leu	Ala	Arg	Lys	Ile	Arg	Ser	Asp	Leu	Thr
			20					25					30		
Ala	Leu	Thr	Glu	Ser	Tyr	Val	Lys	His	Gln	Gly	Leu	Asn	Lys	Asn	Ile
		35					40					45			
Asn	Leu	Asp	Ser	Ala	Asp	Gly	Met	Pro	Val	Ala	Ser	Thr	Asp	Gln	Trp
		50				55					60				
Ser	Glu	Leu	Thr	Glu	Ala	Glu	Arg	Leu	Gln	Glu	Asn	Leu	Gln	Ala	Tyr

65	Arg	Thr	Phe	His	Val	Leu	Leu	Ala	Arg	Leu	Leu	Glu	Asp	Gln	Gln	Val	80
					85					90							95
	His	Phe	Thr	Pro	Thr	Glu	Gly	Asp	Phe	His	Gln	Ala	Ile	His	Thr	Leu	
			100						105						110		
	Leu	Leu	Gln	Val	Ala	Ala	Phe	Ala	Tyr	Gln	Ile	Glu	Glu	Leu	Met	Ile	
			115						120						125		
	Leu	Leu	Glu	Tyr	Lys	Ile	Pro	Arg	Asn	Glu	Ala	Asp	Gly	Met	Pro	Ile	
			130						135					140			
	Asn	Val	Gly	Asp	Gly	Gly	Ile	Phe	Glu	Lys	Lys	Leu	Trp	Gly	Leu	Lys	
			145						150					155			160
	Val	Leu	Gln	Glu	Leu	Ser	Gln	Trp	Thr	Val	Arg	Ser	Ile	His	Asp	Leu	
					165					170					175		
	Arg	Phe	Ile	Ser	Ser	His	Gln	Thr	Gly	Ile	Pro	Ala	Arg	Gly	Ser	His	
			180						185						190		
	Tyr	Ile	Ala	Asn	Asn	Lys	Lys	Met									
			195					200									

<210> 729  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<400> 729	Ser	Pro	Leu	Pro	Ile	Thr	Pro	Val	Asn	Ala	Thr	Cys	Ala	Ile	Arg	His
	1				5					10					15	
	Pro	Cys	His	Asn	Asn	Leu	Met	Asn	Gln	Ile	Arg	Ser	Gln	Leu	Ala	Gln
				20					25					30		
	Leu	Asn	Gly	Ser	Ala	Asn	Ala	Leu	Phe	Ile	Leu	Tyr	Tyr	Thr	Ala	Gln
			35					40					45			
	Gly	Glu	Pro	Phe	Pro	Asn	Asn	Leu	Asp	Lys	Leu	Cys	Gly	Pro	Asn	Val
			50				55				60					
	Thr	Asp	Phe	Pro	Ser	Phe	His	Ala	Asn	Gly	Thr	Glu	Lys	Ala	Lys	Leu
			65			70					75					80
	Val	Glu	Leu	Tyr	Arg	Ile	Val	Val	Tyr	Leu	Gly	Thr	Ser	Leu	Gly	Asn
				85						90					95	
	Ile	Thr	Arg	Asp	Gln	Lys	Ile	Leu	Asn	Pro	Ser	Ala	Leu	Ser	Leu	His
			100						105					110		
	Ser	Lys	Leu	Asn	Ala	Thr	Ala	Asp	Ile	Leu	Arg	Gly	Leu	Leu	Ser	Asn
			115					120						125		
	Val	Leu	Cys	Arg	Leu	Cys	Ser	Lys	Tyr	His	Val	Gly	His	Val	Asp	Val
			130				135					140				
	Thr	Tyr	Gly	Pro	Asp	Thr	Ser	Gly	Lys	Asp	Val	Phe	Gln	Lys	Lys	Lys
			145			150					155					160
	Leu	Gly	Cys	Gln	Leu	Leu	Gly	Lys	Tyr	Lys	Gln	Ile	Ile	Ala	Val	Leu
				165						170					175	
	Ala	Gln	Ala	Phe												
			180													

<210> 730  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<400> 730	Ser	Pro	Leu	Pro	Ile	Thr	Pro	Val	Asn	Ala	Thr	Cys	Ala	Ile	Arg	His
	1				5					10					15	
	Pro	Cys	His	Asn	Asn	Leu	Met	Asn	Gln	Ile	Arg	Ser	Gln	Leu	Ala	Gln
				20					25					30		
	Leu	Asn	Gly	Ser	Ala	Asn	Ala	Leu	Phe	Ile	Leu	Tyr	Tyr	Thr	Ala	Gln
			35					40					45			
	Gly	Glu	Pro	Phe	Pro	Asn	Asn	Leu	Asp	Lys	Leu	Cys	Gly	Pro	Asn	Val
			50				55					60				

Thr	Asp	Phe	Pro	Ala		His	Ala	Asn	Gly	Thr	Glu	Lys	Ala		Leu
65					70					75					80
Val	Glu	Leu	Tyr	Arg	Ile	Val	Val	Tyr	Leu	Gly	Thr	Ser	Leu	Gly	Asn
				85					90					95	
Ile	Thr	Arg	Asp	Gln	Lys	Ile	Leu	Asn	Pro	Ser	Ala	Leu	Ser	Leu	His
			100					105					110		
Ser	Lys	Leu	Asn	Ala	Thr	Ala	Asp	Ile	Leu	Arg	Gly	Leu	Leu	Ser	Asn
		115					120					125			
Val	Leu	Cys	Arg	Leu	Cys	Ser	Lys	Tyr	His	Val	Gly	His	Val	Asp	Val
	130				135						140				
Thr	Tyr	Gly	Pro	Asp	Thr	Ser	Gly	Lys	Asp	Val	Phe	Gln	Lys	Lys	Lys
145					150					155					160
Leu	Gly	Cys	Gln	Leu	Leu	Gly	Lys	Tyr	Lys	Gln	Ile	Ile	Ala	Val	Leu
			165						170					175	
Ala	Gln	Ala	Phe												
			180												

<210> 731  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<400> 731

Ser	Pro	Leu	Pro	Ile	Thr	Pro	Val	Asn	Ala	Thr	Cys	Ala	Ile	Arg	His
1				5					10					15	
Pro	Cys	His	Asn	Asn	Leu	Met	Asn	Gln	Ile	Arg	Ser	Gln	Leu	Ala	Gln
			20					25					30		
Leu	Asn	Gly	Ser	Ala	Asn	Ala	Leu	Phe	Ile	Leu	Tyr	Tyr	Thr	Ala	Gln
	35					40						45			
Gly	Glu	Pro	Phe	Pro	Asn	Asn	Leu	Asp	Lys	Leu	Cys	Gly	Pro	Asn	Val
	50				55						60				
Thr	Asp	Phe	Pro	Pro	Ile	His	Ala	Asn	Gly	Thr	Glu	Lys	Ala	Lys	Leu
65				70						75					80
Val	Glu	Leu	Tyr	Arg	Ile	Val	Val	Tyr	Leu	Gly	Thr	Ser	Leu	Gly	Asn
			85						90					95	
Ile	Thr	Arg	Asp	Gln	Lys	Ile	Leu	Asn	Pro	Ser	Ala	Leu	Ser	Leu	His
			100					105					110		
Ser	Lys	Leu	Asn	Ala	Thr	Ala	Asp	Ile	Leu	Arg	Gly	Leu	Leu	Ser	Asn
		115					120					125			
Val	Leu	Cys	Arg	Leu	Cys	Ser	Lys	Tyr	His	Val	Gly	His	Val	Asp	Val
	130				135						140				
Thr	Tyr	Gly	Pro	Asp	Thr	Ser	Gly	Lys	Asp	Val	Phe	Gln	Lys	Lys	Lys
145					150					155					160
Leu	Gly	Cys	Gln	Leu	Leu	Gly	Lys	Tyr	Lys	Gln	Ile	Ile	Ala	Val	Leu
			165						170					175	
Ala	Gln	Ala	Phe												
			180												

<210> 732  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<400> 732

Ser	Pro	Leu	Pro	Ile	Thr	Pro	Val	Asn	Ala	Thr	Cys	Ala	Ile	Arg	His
1				5					10					15	
Pro	Cys	His	Asn	Asn	Leu	Met	Asn	Gln	Ile	Arg	Ser	Gln	Leu	Ala	Gln
			20					25					30		
Leu	Asn	Gly	Ser	Ala	Asn	Ala	Leu	Phe	Ile	Leu	Tyr	Tyr	Thr	Ala	Gln
	35					40						45			
Gly	Glu	Pro	Phe	Pro	Asn	Asn	Leu	Asp	Lys	Leu	Cys	Gly	Pro	Asn	Val
	50				55						60				
Thr	Asp	Phe	Pro	Pro	Val	His	Ala	Asn	Gly	Thr	Glu	Lys	Ala	Lys	Leu



65	Val	Glu	Leu	Tyr	Arg	Ile	Val	Val	Tyr	Leu	Gly	Thr	Ser	Leu	Gly	Asn	80
					85					90					95		
	Ile	Thr	Arg	Asp	Gln	Lys	Ile	Leu	Asn	Pro	Ser	Ala	Leu	Ser	Leu	His	
			100						105					110			
	Ser	Lys	Leu	Asn	Ala	Thr	Ala	Asp	Ile	Leu	Arg	Gly	Leu	Leu	Ser	Asn	
			115					120					125				
	Val	Leu	Cys	Arg	Leu	Cys	Ser	Lys	Tyr	His	Val	Gly	His	Val	Asp	Val	
		130				135						140					
	Thr	Tyr	Gly	Pro	Asp	Thr	Ser	Gly	Lys	Asp	Val	Phe	Gln	Lys	Lys	Lys	
	145					150				155					160		
	Leu	Gly	Cys	Gln	Leu	Leu	Gly	Lys	Tyr	Lys	Gln	Ile	Ile	Ala	Val	Leu	
				165					170						175		
	Ala	Gln	Ala	Phe													
				180													

<210> 733  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<400> 733	Ser	Pro	Leu	Pro	Ile	Thr	Pro	Val	Asn	Ala	Thr	Cys	Ala	Ile	Arg	His
	1				5					10					15	
	Pro	Cys	His	Asn	Asn	Leu	Met	Asn	Gln	Ile	Arg	Ser	Gln	Leu	Ala	Gln
				20					25					30		
	Leu	Asn	Gly	Ser	Ala	Asn	Ala	Leu	Phe	Ile	Leu	Tyr	Tyr	Thr	Ala	Gln
			35					40					45			
	Gly	Glu	Pro	Phe	Pro	Asn	Asn	Leu	Asp	Lys	Leu	Cys	Gly	Pro	Asn	Val
	50					55						60				
	Thr	Asp	Phe	Pro	Pro	Phe	His	Ala	Asn	Gly	Thr	Glu	Lys	Ala	Lys	Leu
	65					70				75					80	
	Val	Glu	Leu	Tyr	His	Ile	Val	Val	Tyr	Leu	Gly	Thr	Ser	Leu	Gly	Asn
				85						90					95	
	Ile	Thr	Arg	Asp	Gln	Lys	Ile	Leu	Asn	Pro	Ser	Ala	Leu	Ser	Leu	His
			100						105					110		
	Ser	Lys	Leu	Asn	Ala	Thr	Ala	Asp	Ile	Leu	Arg	Gly	Leu	Leu	Ser	Asn
			115					120					125			
	Val	Leu	Cys	Arg	Leu	Cys	Ser	Lys	Tyr	His	Val	Gly	His	Val	Asp	Val
		130				135						140				
	Thr	Tyr	Gly	Pro	Asp	Thr	Ser	Gly	Lys	Asp	Val	Phe	Gln	Lys	Lys	Lys
	145					150				155					160	
	Leu	Gly	Cys	Gln	Leu	Leu	Gly	Lys	Tyr	Lys	Gln	Ile	Ile	Ala	Val	Leu
				165					170						175	
	Ala	Gln	Ala	Phe												
				180												

<210> 734  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<400> 734	Ser	Pro	Leu	Pro	Ile	Thr	Pro	Val	Asn	Ala	Thr	Cys	Ala	Ile	Arg	His
	1				5					10					15	
	Pro	Cys	His	Asn	Asn	Leu	Met	Asn	Gln	Ile	Arg	Ser	Gln	Leu	Ala	Gln
				20					25					30		
	Leu	Asn	Gly	Ser	Ala	Asn	Ala	Leu	Phe	Ile	Leu	Tyr	Tyr	Thr	Ala	Gln
			35					40					45			
	Gly	Glu	Pro	Phe	Pro	Asn	Asn	Leu	Asp	Lys	Leu	Cys	Gly	Pro	Asn	Val
	50					55						60				
	Thr	Asp	Phe	Pro	Pro	Phe	His	Ala	Asn	Gly	Thr	Glu	Lys	Ala	Lys	Leu
	65					70				75					80	

Val	Glu	Leu	Tyr	Gln	Val	Val	Tyr	Leu	Gly	Thr	Ser	Leu	Asn
				85				90				95	
Ile	Thr	Arg	Asp	Gln	Lys	Ile	Leu	Asn	Pro	Ser	Ala	Leu	Ser
			100					105				110	Leu
Ser	Lys	Leu	Asn	Ala	Thr	Ala	Asp	Ile	Leu	Arg	Gly	Leu	Ser
		115					120					125	Asn
Val	Leu	Cys	Arg	Leu	Cys	Ser	Lys	Tyr	His	Val	Gly	His	Val
	130						135				140		Asp
Thr	Tyr	Gly	Pro	Asp	Thr	Ser	Gly	Lys	Asp	Val	Phe	Gln	Lys
	145						150				155		Lys
Leu	Gly	Cys	Gln	Leu	Leu	Gly	Lys	Tyr	Lys	Gln	Ile	Ile	Ala
				165					170				Val
Ala	Gln	Ala	Phe										Leu
			180										

<210> 735  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

Ser	Pro	Leu	Pro	Ile	Thr	Pro	Val	Asn	Ala	Thr	Cys	Ala	Ile	Arg	His
1				5					10					15	
Pro	Cys	His	Asn	Asn	Leu	Met	Asn	Gln	Ile	Arg	Ser	Gln	Leu	Ala	Gln
			20					25					30		
Leu	Asn	Gly	Ser	Ala	Asn	Ala	Leu	Phe	Ile	Leu	Tyr	Tyr	Thr	Ala	Gln
	35						40					45			
Gly	Glu	Pro	Phe	Pro	Asn	Asn	Leu	Asp	Lys	Leu	Cys	Gly	Pro	Asn	Val
	50					55					60				
Thr	Asp	Phe	Pro	Pro	Phe	His	Ala	Asn	Gly	Thr	Glu	Lys	Ala	Lys	Leu
	65					70				75					80
Val	Glu	Leu	Tyr	Arg	Ile	Val	Val	Tyr	Leu	Gly	Thr	Ser	Leu	Gly	Asn
			85						90					95	
Ile	Thr	His	Asp	Gln	Lys	Ile	Leu	Asn	Pro	Ser	Ala	Leu	Ser	Leu	His
			100					105					110		
Ser	Lys	Leu	Asn	Ala	Thr	Ala	Asp	Ile	Leu	Arg	Gly	Leu	Leu	Ser	Asn
		115					120					125			
Val	Leu	Cys	Arg	Leu	Cys	Ser	Lys	Tyr	His	Val	Gly	His	Val	Asp	Val
	130						135				140				
Thr	Tyr	Gly	Pro	Asp	Thr	Ser	Gly	Lys	Asp	Val	Phe	Gln	Lys	Lys	Lys
	145						150				155				160
Leu	Gly	Cys	Gln	Leu	Leu	Gly	Lys	Tyr	Lys	Gln	Ile	Ile	Ala	Val	Leu
				165					170						175
Ala	Gln	Ala	Phe												
			180												

<210> 736  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

Ser	Pro	Leu	Pro	Ile	Thr	Pro	Val	Asn	Ala	Thr	Cys	Ala	Ile	Arg	His
1				5					10					15	
Pro	Cys	His	Asn	Asn	Leu	Met	Asn	Gln	Ile	Arg	Ser	Gln	Leu	Ala	Gln
			20					25					30		
Leu	Asn	Gly	Ser	Ala	Asn	Ala	Leu	Phe	Ile	Leu	Tyr	Tyr	Thr	Ala	Gln
	35						40					45			
Gly	Glu	Pro	Phe	Pro	Asn	Asn	Leu	Asp	Lys	Leu	Cys	Gly	Pro	Asn	Val
	50					55					60				
Thr	Asp	Phe	Pro	Pro	Phe	His	Ala	Asn	Gly	Thr	Glu	Lys	Ala	Lys	Leu
	65					70				75					80
Val	Glu	Leu	Tyr	Arg	Ile	Val	Val	Tyr	Leu	Gly	Thr	Ser	Leu	Gly	Asn

Ile	Thr	Gln	Asp	85	Gln	Lys	Ile	Leu	Asn	90	Pro	Ser	Ala	Leu	Ser	Leu	His
			100						105						110		
Ser	Lys	Leu	Asn	Ala	Thr	Ala	Asp	Ile	Leu	Arg	Gly	Leu	Leu	Ser	Asn		
		115					120					125					
Val	Leu	Cys	Arg	Leu	Cys	Ser	Lys	Tyr	His	Val	Gly	His	Val	Asp	Val		
	130					135					140						
Thr	Tyr	Gly	Pro	Asp	Thr	Ser	Gly	Lys	Asp	Val	Phe	Gln	Lys	Lys	Lys		
145					150				155						160		
Leu	Gly	Cys	Gln	Leu	Leu	Gly	Lys	Tyr	Lys	Gln	Ile	Ile	Ala	Val	Leu		
			165						170					175			
Ala	Gln	Ala	Phe														
			180														

<210> 737  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

Ser	Pro	Leu	Pro	Ile	Thr	Pro	Val	Asn	Ala	Thr	Cys	Ala	Ile	Arg	His		
1				5					10					15			
Pro	Cys	His	Asn	Asn	Leu	Met	Asn	Gln	Ile	Arg	Ser	Gln	Leu	Ala	Gln		
			20					25					30				
Leu	Asn	Gly	Ser	Ala	Asn	Ala	Leu	Phe	Ile	Leu	Tyr	Tyr	Thr	Ala	Gln		
	35						40					45					
Gly	Glu	Pro	Phe	Pro	Asn	Asn	Leu	Asp	Lys	Leu	Cys	Gly	Pro	Asn	Val		
	50				55						60						
Thr	Asp	Phe	Pro	Pro	Phe	His	Ala	Asn	Gly	Thr	Glu	Lys	Ala	Lys	Leu		
65					70				75						80		
Val	Glu	Leu	Tyr	Arg	Ile	Val	Val	Tyr	Leu	Gly	Thr	Ser	Leu	Gly	Asn		
			85					90					95				
Ile	Thr	Arg	Asp	Gln	Gln	Ile	Leu	Asn	Pro	Ser	Ala	Leu	Ser	Leu	His		
			100					105					110				
Ser	Lys	Leu	Asn	Ala	Thr	Ala	Asp	Ile	Leu	Arg	Gly	Leu	Leu	Ser	Asn		
	115						120					125					
Val	Leu	Cys	Arg	Leu	Cys	Ser	Lys	Tyr	His	Val	Gly	His	Val	Asp	Val		
	130					135					140						
Thr	Tyr	Gly	Pro	Asp	Thr	Ser	Gly	Lys	Asp	Val	Phe	Gln	Lys	Lys	Lys		
145					150				155						160		
Leu	Gly	Cys	Gln	Leu	Leu	Gly	Lys	Tyr	Lys	Gln	Ile	Ile	Ala	Val	Leu		
			165						170					175			
Ala	Gln	Ala	Phe														
			180														

<210> 738  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

Ser	Pro	Leu	Pro	Ile	Thr	Pro	Val	Asn	Ala	Thr	Cys	Ala	Ile	Arg	His		
1				5					10					15			
Pro	Cys	His	Asn	Asn	Leu	Met	Asn	Gln	Ile	Arg	Ser	Gln	Leu	Ala	Gln		
			20					25					30				
Leu	Asn	Gly	Ser	Ala	Asn	Ala	Leu	Phe	Ile	Leu	Tyr	Tyr	Thr	Ala	Gln		
	35						40					45					
Gly	Glu	Pro	Phe	Pro	Asn	Asn	Leu	Asp	Lys	Leu	Cys	Gly	Pro	Asn	Val		
	50				55						60						
Thr	Asp	Phe	Pro	Pro	Phe	His	Ala	Asn	Gly	Thr	Glu	Lys	Ala	Lys	Leu		
65					70				75						80		
Val	Glu	Leu	Tyr	Arg	Ile	Val	Val	Tyr	Leu	Gly	Thr	Ser	Leu	Gly	Asn		
			85					90					95				

Ile	Thr	Arg	Asp	Gln		Ile	Leu	Asn	Pro	Ser	Ala	Leu	Ser		His
			100					105					110		
Ser	Lys	Leu	Asn	Ala	Thr	Ala	Asp	Ile	Leu	Arg	Gly	Leu	Leu	Ser	Asn
		115					120					125			
Val	Leu	Cys	Arg	Leu	Cys	Ser	Lys	Tyr	His	Val	Gly	His	Val	Asp	Val
		130				135					140				
Thr	Tyr	Gly	Pro	Asp	Thr	Ser	Gly	Lys	Asp	Val	Phe	Gln	Lys	Lys	Lys
145					150					155					160
Leu	Gly	Cys	Gln	Leu	Leu	Gly	Lys	Tyr	Lys	Gln	Ile	Ile	Ala	Val	Leu
			165						170					175	
Ala	Gln	Ala	Phe												
			180												

<210> 739  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<400> 739															
Ser	Pro	Leu	Pro	Ile	Thr	Pro	Val	Asn	Ala	Thr	Cys	Ala	Ile	Arg	His
1				5					10					15	
Pro	Cys	His	Asn	Asn	Leu	Met	Asn	Gln	Ile	Arg	Ser	Gln	Leu	Ala	Gln
			20					25					30		
Leu	Asn	Gly	Ser	Ala	Asn	Ala	Leu	Phe	Ile	Leu	Tyr	Tyr	Thr	Ala	Gln
		35					40					45			
Gly	Glu	Pro	Phe	Pro	Asn	Asn	Leu	Asp	Lys	Leu	Cys	Gly	Pro	Asn	Val
		50				55					60				
Thr	Asp	Phe	Pro	Pro	Phe	His	Ala	Asn	Gly	Thr	Glu	Lys	Ala	Lys	Leu
65					70				75						80
Val	Glu	Leu	Tyr	Arg	Ile	Val	Val	Tyr	Leu	Gly	Thr	Ser	Leu	Gly	Asn
			85					90					95		
Ile	Thr	Arg	Asp	Gln	Lys	Ile	Val	Asn	Pro	Ser	Ala	Leu	Ser	Leu	His
			100					105					110		
Ser	Lys	Leu	Asn	Ala	Thr	Ala	Asp	Ile	Leu	Arg	Gly	Leu	Leu	Ser	Asn
		115					120					125			
Val	Leu	Cys	Arg	Leu	Cys	Ser	Lys	Tyr	His	Val	Gly	His	Val	Asp	Val
		130				135					140				
Thr	Tyr	Gly	Pro	Asp	Thr	Ser	Gly	Lys	Asp	Val	Phe	Gln	Lys	Lys	Lys
145					150					155					160
Leu	Gly	Cys	Gln	Leu	Leu	Gly	Lys	Tyr	Lys	Gln	Ile	Ile	Ala	Val	Leu
			165						170					175	
Ala	Gln	Ala	Phe												
			180												

<210> 740  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<400> 740															
Ser	Pro	Leu	Pro	Ile	Thr	Pro	Val	Asn	Ala	Thr	Cys	Ala	Ile	Arg	His
1				5					10					15	
Pro	Cys	His	Asn	Asn	Leu	Met	Asn	Gln	Ile	Arg	Ser	Gln	Leu	Ala	Gln
			20					25					30		
Leu	Asn	Gly	Ser	Ala	Asn	Ala	Leu	Phe	Ile	Leu	Tyr	Tyr	Thr	Ala	Gln
		35					40					45			
Gly	Glu	Pro	Phe	Pro	Asn	Asn	Leu	Asp	Lys	Leu	Cys	Gly	Pro	Asn	Val
		50				55					60				
Thr	Asp	Phe	Pro	Pro	Phe	His	Ala	Asn	Gly	Thr	Glu	Lys	Ala	Lys	Leu
65					70				75						80
Val	Glu	Leu	Tyr	Arg	Ile	Val	Val	Tyr	Leu	Gly	Thr	Ser	Leu	Gly	Asn
			85					90					95		
Ile	Thr	Arg	Asp	Gln	Lys	Ile	Ile	Asn	Pro	Ser	Ala	Leu	Ser	Leu	His



Ser Lys Leu Asn Ala Ala Asp Ile Leu Arg Gly Leu Leu Asn  
115 120 125  
Val Leu Cys Arg Leu Cys Ser Lys Tyr His Val Gly His Val Asp Val  
130 135 140  
Thr Tyr Gly Pro Asp Thr Ser Gly Lys Asp Val Phe Gln Lys Lys Lys  
145 150 155 160  
Leu Gly Cys Gln Leu Leu Gly Lys Tyr Lys Gln Ile Ile Ala Val Leu  
165 170 175  
Ala Gln Ala Phe  
180

<210> 743  
<211> 180  
<212> PRT  
<213> Homo sapiens

<400> 743  
Ser Pro Leu Pro Ile Thr Pro Val Asn Ala Thr Cys Ala Ile Arg His  
1 5 10 15  
Pro Cys His Asn Asn Leu Met Asn Gln Ile Arg Ser Gln Leu Ala Gln  
20 25 30  
Leu Asn Gly Ser Ala Asn Ala Leu Phe Ile Leu Tyr Tyr Thr Ala Gln  
35 40 45  
Gly Glu Pro Phe Pro Asn Asn Leu Asp Lys Leu Cys Gly Pro Asn Val  
50 55 60  
Thr Asp Phe Pro Pro Phe His Ala Asn Gly Thr Glu Lys Ala Lys Leu  
65 70 75 80  
Val Glu Leu Tyr Arg Ile Val Val Tyr Leu Gly Thr Ser Leu Gly Asn  
85 90 95  
Ile Thr Arg Asp Gln Lys Ile Leu Asn Pro Ser Ala Val Ser Leu His  
100 105 110  
Ser Lys Leu Asn Ala Thr Ala Asp Ile Leu Arg Gly Leu Leu Ser Asn  
115 120 125  
Val Leu Cys Arg Leu Cys Ser Lys Tyr His Val Gly His Val Asp Val  
130 135 140  
Thr Tyr Gly Pro Asp Thr Ser Gly Lys Asp Val Phe Gln Lys Lys Lys  
145 150 155 160  
Leu Gly Cys Gln Leu Leu Gly Lys Tyr Lys Gln Ile Ile Ala Val Leu  
165 170 175  
Ala Gln Ala Phe  
180

<210> 744  
<211> 180  
<212> PRT  
<213> Homo sapiens

<400> 744  
Ser Pro Leu Pro Ile Thr Pro Val Asn Ala Thr Cys Ala Ile Arg His  
1 5 10 15  
Pro Cys His Asn Asn Leu Met Asn Gln Ile Arg Ser Gln Leu Ala Gln  
20 25 30  
Leu Asn Gly Ser Ala Asn Ala Leu Phe Ile Leu Tyr Tyr Thr Ala Gln  
35 40 45  
Gly Glu Pro Phe Pro Asn Asn Leu Asp Lys Leu Cys Gly Pro Asn Val  
50 55 60  
Thr Asp Phe Pro Pro Phe His Ala Asn Gly Thr Glu Lys Ala Lys Leu  
65 70 75 80  
Val Glu Leu Tyr Arg Ile Val Val Tyr Leu Gly Thr Ser Leu Gly Asn  
85 90 95  
Ile Thr Arg Asp Gln Lys Ile Leu Asn Pro Ser Ala Ile Ser Leu His  
100 105 110  
Ser Lys Leu Asn Ala Thr Ala Asp Ile Leu Arg Gly Leu Leu Ser Asn

115	120	125
Val Leu Cys Arg Leu Cys Ser Lys Tyr His Val Gly His Val Asp Val		
130	135	140
Thr Tyr Gly Pro Asp Thr Ser Gly Lys Asp Val Phe Gln Lys Lys Lys		
145	150	155
Leu Gly Cys Gln Leu Leu Gly Lys Tyr Lys Gln Ile Ile Ala Val Leu		
165	170	175
Ala Gln Ala Phe		
180		

<210> 745  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<400> 745

Ser Pro Leu Pro Ile Thr Pro Val Asn Ala Thr Cys Ala Ile Arg His		
1	5	10
Pro Cys His Asn Asn Leu Met Asn Gln Ile Arg Ser Gln Leu Ala Gln		
20	25	30
Leu Asn Gly Ser Ala Asn Ala Leu Phe Ile Leu Tyr Tyr Thr Ala Gln		
35	40	45
Gly Glu Pro Phe Pro Asn Asn Leu Asp Lys Leu Cys Gly Pro Asn Val		
50	55	60
Thr Asp Phe Pro Pro Phe His Ala Asn Gly Thr Glu Lys Ala Lys Leu		
65	70	75
Val Glu Leu Tyr Arg Ile Val Val Tyr Leu Gly Thr Ser Leu Gly Asn		
85	90	95
Ile Thr Arg Asp Gln Lys Ile Leu Asn Pro Ser Ala Leu Ser Leu His		
100	105	110
Ser Lys Leu Asn Ala Thr Ala Asp Ile Leu Arg Gly Leu Leu Ser Asn		
115	120	125
Val Leu Cys Arg Leu Cys Ser Lys His His Val Gly His Val Asp Val		
130	135	140
Thr Tyr Gly Pro Asp Thr Ser Gly Lys Asp Val Phe Gln Lys Lys Lys		
145	150	155
Leu Gly Cys Gln Leu Leu Gly Lys Tyr Lys Gln Ile Ile Ala Val Leu		
165	170	175
Ala Gln Ala Phe		
180		

<210> 746  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<400> 746

Ser Pro Leu Pro Ile Thr Pro Val Asn Ala Thr Cys Ala Ile Arg His		
1	5	10
Pro Cys His Asn Asn Leu Met Asn Gln Ile Arg Ser Gln Leu Ala Gln		
20	25	30
Leu Asn Gly Ser Ala Asn Ala Leu Phe Ile Leu Tyr Tyr Thr Ala Gln		
35	40	45
Gly Glu Pro Phe Pro Asn Asn Leu Asp Lys Leu Cys Gly Pro Asn Val		
50	55	60
Thr Asp Phe Pro Pro Phe His Ala Asn Gly Thr Glu Lys Ala Lys Leu		
65	70	75
Val Glu Leu Tyr Arg Ile Val Val Tyr Leu Gly Thr Ser Leu Gly Asn		
85	90	95
Ile Thr Arg Asp Gln Lys Ile Leu Asn Pro Ser Ala Leu Ser Leu His		
100	105	110
Ser Lys Leu Asn Ala Thr Ala Asp Ile Leu Arg Gly Leu Leu Ser Asn		
115	120	125

Val	Leu	Cys	Arg	Leu		Ser	Lys	Ile	His	Val	Gly	His	Val		Val
130						135					140				
Thr	Tyr	Gly	Pro	Asp	Thr	Ser	Gly	Lys	Asp	Val	Phe	Gln	Lys	Lys	Lys
145					150					155					160
Leu	Gly	Cys	Gln	Leu	Leu	Gly	Lys	Tyr	Lys	Gln	Ile	Ile	Ala	Val	Leu
				165					170						175
Ala	Gln	Ala	Phe												
			180												

<210> 747  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<400> 747

Ser	Pro	Leu	Pro	Ile	Thr	Pro	Val	Asn	Ala	Thr	Cys	Ala	Ile	Arg	His
1				5					10					15	
Pro	Cys	His	Asn	Asn	Leu	Met	Asn	Gln	Ile	Arg	Ser	Gln	Leu	Ala	Gln
			20					25					30		
Leu	Asn	Gly	Ser	Ala	Asn	Ala	Leu	Phe	Ile	Leu	Tyr	Tyr	Thr	Ala	Gln
		35					40					45			
Gly	Glu	Pro	Phe	Pro	Asn	Asn	Leu	Asp	Lys	Leu	Cys	Gly	Pro	Asn	Val
	50				55					60					
Thr	Asp	Phe	Pro	Pro	Phe	His	Ala	Asn	Gly	Thr	Glu	Lys	Ala	Lys	Leu
65					70					75					80
Val	Glu	Leu	Tyr	Arg	Ile	Val	Val	Tyr	Leu	Gly	Thr	Ser	Leu	Gly	Asn
			85					90						95	
Ile	Thr	Arg	Asp	Gln	Lys	Ile	Leu	Asn	Pro	Ser	Ala	Leu	Ser	Leu	His
			100					105					110		
Ser	Lys	Leu	Asn	Ala	Thr	Ala	Asp	Ile	Leu	Arg	Gly	Leu	Leu	Ser	Asn
		115					120					125			
Val	Leu	Cys	Arg	Leu	Cys	Ser	Lys	Tyr	His	Val	Gly	His	Val	Gln	Val
	130					135					140				
Thr	Tyr	Gly	Pro	Asp	Thr	Ser	Gly	Lys	Asp	Val	Phe	Gln	Lys	Lys	Lys
145					150					155					160
Leu	Gly	Cys	Gln	Leu	Leu	Gly	Lys	Tyr	Lys	Gln	Ile	Ile	Ala	Val	Leu
				165					170						175
Ala	Gln	Ala	Phe												
			180												

<210> 748  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<400> 748

Ser	Pro	Leu	Pro	Ile	Thr	Pro	Val	Asn	Ala	Thr	Cys	Ala	Ile	Arg	His
1				5					10					15	
Pro	Cys	His	Asn	Asn	Leu	Met	Asn	Gln	Ile	Arg	Ser	Gln	Leu	Ala	Gln
			20					25					30		
Leu	Asn	Gly	Ser	Ala	Asn	Ala	Leu	Phe	Ile	Leu	Tyr	Tyr	Thr	Ala	Gln
		35					40					45			
Gly	Glu	Pro	Phe	Pro	Asn	Asn	Leu	Asp	Lys	Leu	Cys	Gly	Pro	Asn	Val
	50				55					60					
Thr	Asp	Phe	Pro	Pro	Phe	His	Ala	Asn	Gly	Thr	Glu	Lys	Ala	Lys	Leu
65					70					75					80
Val	Glu	Leu	Tyr	Arg	Ile	Val	Val	Tyr	Leu	Gly	Thr	Ser	Leu	Gly	Asn
			85					90						95	
Ile	Thr	Arg	Asp	Gln	Lys	Ile	Leu	Asn	Pro	Ser	Ala	Leu	Ser	Leu	His
			100					105					110		
Ser	Lys	Leu	Asn	Ala	Thr	Ala	Asp	Ile	Leu	Arg	Gly	Leu	Leu	Ser	Asn
		115					120					125			
Val	Leu	Cys	Arg	Leu	Cys	Ser	Lys	Tyr	His	Val	Gly	His	Val	Asn	Val



130	Thr	Tyr	Gly	Pro	Asp	135	Thr	Ser	Gly	Lys	Asp	140	Val	Phe	Gln	Lys	Lys	Lys
145	Leu	Gly	Cys	Gln	Leu	150	Leu	Gly	Lys	Tyr	Lys	155	Gln	Ile	Ile	Ala	Val	Leu
					165						170						175	
Ala	Gln	Ala	Phe															
					180													

<210> 749  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<400> 749

Ser	Pro	Leu	Pro	Ile	Thr	Pro	Val	Asn	Ala	Thr	Cys	Ala	Ile	Arg	His
1				5					10					15	
Pro	Cys	His	Asn	Asn	Leu	Met	Asn	Gln	Ile	Arg	Ser	Gln	Leu	Ala	Gln
			20					25					30		
Leu	Asn	Gly	Ser	Ala	Asn	Ala	Leu	Phe	Ile	Leu	Tyr	Tyr	Thr	Ala	Gln
		35					40					45			
Gly	Glu	Pro	Phe	Pro	Asn	Asn	Leu	Asp	Lys	Leu	Cys	Gly	Pro	Asn	Val
		50				55					60				
Thr	Asp	Phe	Pro	Pro	Phe	His	Ala	Asn	Gly	Thr	Glu	Lys	Ala	Lys	Leu
65					70				75						80
Val	Glu	Leu	Tyr	Arg	Ile	Val	Val	Tyr	Leu	Gly	Thr	Ser	Leu	Gly	Asn
			85						90					95	
Ile	Thr	Arg	Asp	Gln	Lys	Ile	Leu	Asn	Pro	Ser	Ala	Leu	Ser	Leu	His
			100					105					110		
Ser	Lys	Leu	Asn	Ala	Thr	Ala	Asp	Ile	Leu	Arg	Gly	Leu	Leu	Ser	Asn
		115					120					125			
Val	Leu	Cys	Arg	Leu	Cys	Ser	Lys	Tyr	His	Val	Gly	His	Val	Asp	Val
		130					135				140				
Thr	His	Gly	Pro	Asp	Thr	Ser	Gly	Lys	Asp	Val	Phe	Gln	Lys	Lys	Lys
145					150				155						160
Leu	Gly	Cys	Gln	Leu	Leu	Gly	Lys	Tyr	Lys	Gln	Ile	Ile	Ala	Val	Leu
			165						170					175	
Ala	Gln	Ala	Phe												
					180										

<210> 750  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<400> 750

Ser	Pro	Leu	Pro	Ile	Thr	Pro	Val	Asn	Ala	Thr	Cys	Ala	Ile	Arg	His
1				5					10					15	
Pro	Cys	His	Asn	Asn	Leu	Met	Asn	Gln	Ile	Arg	Ser	Gln	Leu	Ala	Gln
			20					25					30		
Leu	Asn	Gly	Ser	Ala	Asn	Ala	Leu	Phe	Ile	Leu	Tyr	Tyr	Thr	Ala	Gln
		35					40					45			
Gly	Glu	Pro	Phe	Pro	Asn	Asn	Leu	Asp	Lys	Leu	Cys	Gly	Pro	Asn	Val
		50				55					60				
Thr	Asp	Phe	Pro	Pro	Phe	His	Ala	Asn	Gly	Thr	Glu	Lys	Ala	Lys	Leu
65					70				75						80
Val	Glu	Leu	Tyr	Arg	Ile	Val	Val	Tyr	Leu	Gly	Thr	Ser	Leu	Gly	Asn
			85						90					95	
Ile	Thr	Arg	Asp	Gln	Lys	Ile	Leu	Asn	Pro	Ser	Ala	Leu	Ser	Leu	His
			100					105					110		
Ser	Lys	Leu	Asn	Ala	Thr	Ala	Asp	Ile	Leu	Arg	Gly	Leu	Leu	Ser	Asn
		115					120					125			
Val	Leu	Cys	Arg	Leu	Cys	Ser	Lys	Tyr	His	Val	Gly	His	Val	Asp	Val
		130					135				140				

Thr Ile Gly Pro Asp 150 Ser Gly Lys Asp Val Phe Gln Lys 155 Lys 160  
 145 155 160  
 Leu Gly Cys Gln Leu Leu Gly Lys Tyr Lys Gln Ile Ile Ala Val Leu 175  
 165 170 175  
 Ala Gln Ala Phe 180  
 180

<210> 751  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<400> 751  
 Ser Pro Leu Pro Ile Thr Pro Val Asn Ala Thr Cys Ala Ile Arg His  
 1 5 10 15  
 Pro Cys His Asn Asn Leu Met Asn Gln Ile Arg Ser Gln Leu Ala Gln  
 20 25 30  
 Leu Asn Gly Ser Ala Asn Ala Leu Phe Ile Leu Tyr Tyr Thr Ala Gln  
 35 40 45  
 Gly Glu Pro Phe Pro Asn Asn Leu Asp Lys Leu Cys Gly Pro Asn Val  
 50 55 60  
 Thr Asp Phe Pro Pro Phe His Ala Asn Gly Thr Glu Lys Ala Lys Leu  
 65 70 75 80  
 Val Glu Leu Tyr Arg Ile Val Val Tyr Leu Gly Thr Ser Leu Gly Asn  
 85 90 95  
 Ile Thr Arg Asp Gln Lys Ile Leu Asn Pro Ser Ala Leu Ser Leu His  
 100 105 110  
 Ser Lys Leu Asn Ala Thr Ala Asp Ile Leu Arg Gly Leu Leu Ser Asn  
 115 120 125  
 Val Leu Cys Arg Leu Cys Ser Lys Tyr His Val Gly His Val Asp Val  
 130 135 140  
 Thr Tyr Gly Ser Asp Thr Ser Gly Lys Asp Val Phe Gln Lys Lys Lys  
 145 150 155 160  
 Leu Gly Cys Gln Leu Leu Gly Lys Tyr Lys Gln Ile Ile Ala Val Leu  
 165 170 175  
 Ala Gln Ala Phe 180  
 180

<210> 752  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<400> 752  
 Ser Pro Leu Pro Ile Thr Pro Val Asn Ala Thr Cys Ala Ile Arg His  
 1 5 10 15  
 Pro Cys His Asn Asn Leu Met Asn Gln Ile Arg Ser Gln Leu Ala Gln  
 20 25 30  
 Leu Asn Gly Ser Ala Asn Ala Leu Phe Ile Leu Tyr Tyr Thr Ala Gln  
 35 40 45  
 Gly Glu Pro Phe Pro Asn Asn Leu Asp Lys Leu Cys Gly Pro Asn Val  
 50 55 60  
 Thr Asp Phe Pro Pro Phe His Ala Asn Gly Thr Glu Lys Ala Lys Leu  
 65 70 75 80  
 Val Glu Leu Tyr Arg Ile Val Val Tyr Leu Gly Thr Ser Leu Gly Asn  
 85 90 95  
 Ile Thr Arg Asp Gln Lys Ile Leu Asn Pro Ser Ala Leu Ser Leu His  
 100 105 110  
 Ser Lys Leu Asn Ala Thr Ala Asp Ile Leu Arg Gly Leu Leu Ser Asn  
 115 120 125  
 Val Leu Cys Arg Leu Cys Ser Lys Tyr His Val Gly His Val Asp Val  
 130 135 140  
 Thr Tyr Gly Ala Asp Thr Ser Gly Lys Asp Val Phe Gln Lys Lys Lys



Leu Gly Cys Gln Leu Gly Lys Tyr Lys Gln Ile Ile Ala Leu  
 165 170 175  
 Ala Gln Ala Phe  
 180

<210> 755  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<400> 755  
 Ser Pro Leu Pro Ile Thr Pro Val Asn Ala Thr Cys Ala Ile Arg His  
 1 5 10 15  
 Pro Cys His Asn Asn Leu Met Asn Gln Ile Arg Ser Gln Leu Ala Gln  
 20 25 30  
 Leu Asn Gly Ser Ala Asn Ala Leu Phe Ile Leu Tyr Tyr Thr Ala Gln  
 35 40 45  
 Gly Glu Pro Phe Pro Asn Asn Leu Asp Lys Leu Cys Gly Pro Asn Val  
 50 55 60  
 Thr Asp Phe Pro Pro Phe His Ala Asn Gly Thr Glu Lys Ala Lys Leu  
 65 70 75 80  
 Val Glu Leu Tyr Arg Ile Val Val Tyr Leu Gly Thr Ser Leu Gly Asn  
 85 90 95  
 Ile Thr Arg Asp Gln Lys Ile Leu Asn Pro Ser Ala Leu Ser Leu His  
 100 105 110  
 Ser Lys Leu Asn Ala Thr Ala Asp Ile Leu Arg Gly Leu Leu Ser Asn  
 115 120 125  
 Val Leu Cys Arg Leu Cys Ser Lys Tyr His Val Gly His Val Asp Val  
 130 135 140  
 Thr Tyr Gly Pro Asp Thr Ser Gly Gln Asp Val Phe Gln Lys Lys Lys  
 145 150 155 160  
 Leu Gly Cys Gln Leu Leu Gly Lys Tyr Lys Gln Ile Ile Ala Val Leu  
 165 170 175  
 Ala Gln Ala Phe  
 180

<210> 756  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<400> 756  
 Ser Pro Leu Pro Ile Thr Pro Val Asn Ala Thr Cys Ala Ile Arg His  
 1 5 10 15  
 Pro Cys His Asn Asn Leu Met Asn Gln Ile Arg Ser Gln Leu Ala Gln  
 20 25 30  
 Leu Asn Gly Ser Ala Asn Ala Leu Phe Ile Leu Tyr Tyr Thr Ala Gln  
 35 40 45  
 Gly Glu Pro Phe Pro Asn Asn Leu Asp Lys Leu Cys Gly Pro Asn Val  
 50 55 60  
 Thr Asp Phe Pro Pro Phe His Ala Asn Gly Thr Glu Lys Ala Lys Leu  
 65 70 75 80  
 Val Glu Leu Tyr Arg Ile Val Val Tyr Leu Gly Thr Ser Leu Gly Asn  
 85 90 95  
 Ile Thr Arg Asp Gln Lys Ile Leu Asn Pro Ser Ala Leu Ser Leu His  
 100 105 110  
 Ser Lys Leu Asn Ala Thr Ala Asp Ile Leu Arg Gly Leu Leu Ser Asn  
 115 120 125  
 Val Leu Cys Arg Leu Cys Ser Lys Tyr His Val Gly His Val Asp Val  
 130 135 140  
 Thr Tyr Gly Pro Asp Thr Ser Gly Asn Asp Val Phe Gln Lys Lys Lys  
 145 150 155 160  
 Leu Gly Cys Gln Leu Leu Gly Lys Tyr Lys Gln Ile Ile Ala Val Leu

165  
Ala Gln Ala Phe  
180

170

<210> 757  
<211> 180  
<212> PRT  
<213> Homo sapiens

<400> 757

Ser	Pro	Leu	Pro	Ile	Thr	Pro	Val	Asn	Ala	Thr	Cys	Ala	Ile	Arg	His
1				5					10					15	
Pro	Cys	His	Asn	Asn	Leu	Met	Asn	Gln	Ile	Arg	Ser	Gln	Leu	Ala	Gln
			20					25					30		
Leu	Asn	Gly	Ser	Ala	Asn	Ala	Leu	Phe	Ile	Leu	Tyr	Tyr	Thr	Ala	Gln
		35					40					45			
Gly	Glu	Pro	Phe	Pro	Asn	Asn	Leu	Asp	Lys	Leu	Cys	Gly	Pro	Asn	Val
		50				55					60				
Thr	Asp	Phe	Pro	Pro	Phe	His	Ala	Asn	Gly	Thr	Glu	Lys	Ala	Lys	Leu
65					70					75					80
Val	Glu	Leu	Tyr	Arg	Ile	Val	Val	Tyr	Leu	Gly	Thr	Ser	Leu	Gly	Asn
				85					90					95	
Ile	Thr	Arg	Asp	Gln	Lys	Ile	Leu	Asn	Pro	Ser	Ala	Leu	Ser	Leu	His
			100					105					110		
Ser	Lys	Leu	Asn	Ala	Thr	Ala	Asp	Ile	Leu	Arg	Gly	Leu	Leu	Ser	Asn
		115					120					125			
Val	Leu	Cys	Arg	Leu	Cys	Ser	Lys	Tyr	His	Val	Gly	His	Val	Asp	Val
		130				135					140				
Thr	Tyr	Gly	Pro	Asp	Thr	Ser	Gly	Lys	Gln	Val	Phe	Gln	Lys	Lys	Lys
145					150					155					160
Leu	Gly	Cys	Gln	Leu	Leu	Gly	Lys	Tyr	Lys	Gln	Ile	Ile	Ala	Val	Leu
			165						170					175	

Ala Gln Ala Phe  
180

<210> 758  
<211> 180  
<212> PRT  
<213> Homo sapiens

<400> 758

Ser	Pro	Leu	Pro	Ile	Thr	Pro	Val	Asn	Ala	Thr	Cys	Ala	Ile	Arg	His
1				5					10					15	
Pro	Cys	His	Asn	Asn	Leu	Met	Asn	Gln	Ile	Arg	Ser	Gln	Leu	Ala	Gln
			20					25					30		
Leu	Asn	Gly	Ser	Ala	Asn	Ala	Leu	Phe	Ile	Leu	Tyr	Tyr	Thr	Ala	Gln
		35					40					45			
Gly	Glu	Pro	Phe	Pro	Asn	Asn	Leu	Asp	Lys	Leu	Cys	Gly	Pro	Asn	Val
		50				55					60				
Thr	Asp	Phe	Pro	Pro	Phe	His	Ala	Asn	Gly	Thr	Glu	Lys	Ala	Lys	Leu
65					70					75					80
Val	Glu	Leu	Tyr	Arg	Ile	Val	Val	Tyr	Leu	Gly	Thr	Ser	Leu	Gly	Asn
				85					90					95	
Ile	Thr	Arg	Asp	Gln	Lys	Ile	Leu	Asn	Pro	Ser	Ala	Leu	Ser	Leu	His
			100					105					110		
Ser	Lys	Leu	Asn	Ala	Thr	Ala	Asp	Ile	Leu	Arg	Gly	Leu	Leu	Ser	Asn
		115					120					125			
Val	Leu	Cys	Arg	Leu	Cys	Ser	Lys	Tyr	His	Val	Gly	His	Val	Asp	Val
		130				135					140				
Thr	Tyr	Gly	Pro	Asp	Thr	Ser	Gly	Lys	Asn	Val	Phe	Gln	Lys	Lys	Lys
145					150					155					160
Leu	Gly	Cys	Gln	Leu	Leu	Gly	Lys	Tyr	Lys	Gln	Ile	Ile	Ala	Val	Leu
			165						170					175	

Ala Gln Ala Phe  
180

<210> 759  
<211> 180  
<212> PRT  
<213> Homo sapiens

<400> 759  
Ser Pro Leu Pro Ile Thr Pro Val Asn Ala Thr Cys Ala Ile Arg His  
1 5 10 15  
Pro Cys His Asn Asn Leu Met Asn Gln Ile Arg Ser Gln Leu Ala Gln  
20 25 30  
Leu Asn Gly Ser Ala Asn Ala Leu Phe Ile Leu Tyr Tyr Thr Ala Gln  
35 40 45  
Gly Glu Pro Phe Pro Asn Asn Leu Asp Lys Leu Cys Gly Pro Asn Val  
50 55 60  
Thr Asp Phe Pro Pro Phe His Ala Asn Gly Thr Glu Lys Ala Lys Leu  
65 70 75 80  
Val Glu Leu Tyr Arg Ile Val Val Tyr Leu Gly Thr Ser Leu Gly Asn  
85 90 95  
Ile Thr Arg Asp Gln Lys Ile Leu Asn Pro Ser Ala Leu Ser Leu His  
100 105 110  
Ser Lys Leu Asn Ala Thr Ala Asp Ile Leu Arg Gly Leu Leu Ser Asn  
115 120 125  
Val Leu Cys Arg Leu Cys Ser Lys Tyr His Val Gly His Val Asp Val  
130 135 140  
Thr Tyr Gly Pro Asp Thr Ser Gly Lys Asp Val Ile Gln Lys Lys Lys  
145 150 155 160  
Leu Gly Cys Gln Leu Leu Gly Lys Tyr Lys Gln Ile Ile Ala Val Leu  
165 170 175  
Ala Gln Ala Phe  
180

<210> 760  
<211> 180  
<212> PRT  
<213> Homo sapiens

<400> 760  
Ser Pro Leu Pro Ile Thr Pro Val Asn Ala Thr Cys Ala Ile Arg His  
1 5 10 15  
Pro Cys His Asn Asn Leu Met Asn Gln Ile Arg Ser Gln Leu Ala Gln  
20 25 30  
Leu Asn Gly Ser Ala Asn Ala Leu Phe Ile Leu Tyr Tyr Thr Ala Gln  
35 40 45  
Gly Glu Pro Phe Pro Asn Asn Leu Asp Lys Leu Cys Gly Pro Asn Val  
50 55 60  
Thr Asp Phe Pro Pro Phe His Ala Asn Gly Thr Glu Lys Ala Lys Leu  
65 70 75 80  
Val Glu Leu Tyr Arg Ile Val Val Tyr Leu Gly Thr Ser Leu Gly Asn  
85 90 95  
Ile Thr Arg Asp Gln Lys Ile Leu Asn Pro Ser Ala Leu Ser Leu His  
100 105 110  
Ser Lys Leu Asn Ala Thr Ala Asp Ile Leu Arg Gly Leu Leu Ser Asn  
115 120 125  
Val Leu Cys Arg Leu Cys Ser Lys Tyr His Val Gly His Val Asp Val  
130 135 140  
Thr Tyr Gly Pro Asp Thr Ser Gly Lys Asp Val Gln Lys Lys Lys  
145 150 155 160  
Leu Gly Cys Gln Leu Leu Gly Lys Tyr Lys Gln Ile Ile Ala Val Leu  
165 170 175  
Ala Gln Ala Phe

<210> 761  
 <211> 227  
 <212> PRT  
 <213> Homo sapiens

<400> 761

Ala	Ala	Ile	Gly	Ser	Cys	Ser	Lys	Glu	Tyr	Arg	Val	Leu	Leu	Gly	Gln
1				5					10					15	
Leu	Gln	Lys	Gln	Thr	Asp	Leu	Met	Gln	Asp	Thr	Ser	Arg	Leu	Leu	Asp
		20						25					30		
Pro	Tyr	Ile	Arg	Ile	Gln	Gly	Leu	Asp	Val	Pro	Lys	Leu	Arg	Glu	His
		35					40					45			
Cys	Arg	Glu	Arg	Pro	Gly	Ala	Phe	Pro	Ser	Gln	Glu	Thr	Leu	Arg	Gly
	50					55					60				
Leu	Gly	Arg	Arg	Gly	Phe	Leu	Gln	Thr	Leu	Asn	Ala	Thr	Leu	Gly	Cys
65					70					75					80
Val	Leu	His	Arg	Leu	Ala	Asp	Leu	Glu	Gln	Arg	Leu	Pro	Lys	Ala	Gln
				85					90					95	
Asp	Leu	Glu	Arg	Ser	Gly	Leu	Asn	Ile	Glu	Asp	Leu	Glu	Lys	Leu	Gln
			100					105					110		
Met	Ala	Arg	Pro	Asn	Ile	Leu	Gly	Leu	Arg	Asn	Asn	Ile	Tyr	Cys	Met
		115					120					125			
Ala	Gln	Leu	Leu	Asp	Asn	Ser	Asp	Thr	Ala	Glu	Pro	Thr	Lys	Ala	Gly
	130						135					140			
Arg	Gly	Ala	Ser	Gln	Pro	Pro	Thr	Pro	Thr	Pro	Ala	Ser	Asp	Ala	Phe
145					150					155					160
Gln	Arg	Lys	Leu	Glu	Gly	Cys	Arg	Phe	Leu	His	Gly	Tyr	His	Arg	Phe
				165					170					175	
Met	His	Ser	Val	Gly	Arg	Val	Phe	Ser	Lys	Trp	Gly	Glu	Ser	Pro	Asn
			180					185					190		
Arg	Ser	Arg	Arg	His	Ser	Pro	His	Gln	Ala	Leu	Arg	Lys	Gly	Val	Arg
		195					200					205			
Arg	Thr	Arg	Pro	Ser	Arg	Lys	Gly	Lys	Arg	Leu	Met	Thr	Arg	Gly	Gln
	210					215					220				
Leu	Pro	Arg													
225															

<210> 762  
 <211> 227  
 <212> PRT  
 <213> Homo sapiens

<400> 762

Ala	Ala	Ile	Gly	Ser	Cys	Ser	Lys	Glu	Tyr	Arg	Val	Leu	Leu	Gly	Gln
1				5					10					15	
Leu	Gln	Lys	Gln	Thr	Asp	Leu	Met	Gln	Asp	Thr	Ser	Arg	Leu	Leu	Asp
		20						25					30		
Pro	Tyr	Ile	Arg	Ile	Gln	Gly	Leu	Asp	Val	Pro	Lys	Leu	Arg	Glu	His
		35					40					45			
Cys	Arg	Glu	Arg	Pro	Gly	Ala	Phe	Pro	Ser	Asn	Glu	Thr	Leu	Arg	Gly
	50					55					60				
Leu	Gly	Arg	Arg	Gly	Phe	Leu	Gln	Thr	Leu	Asn	Ala	Thr	Leu	Gly	Cys
65					70					75					80
Val	Leu	His	Arg	Leu	Ala	Asp	Leu	Glu	Gln	Arg	Leu	Pro	Lys	Ala	Gln
				85					90					95	
Asp	Leu	Glu	Arg	Ser	Gly	Leu	Asn	Ile	Glu	Asp	Leu	Glu	Lys	Leu	Gln
			100					105					110		
Met	Ala	Arg	Pro	Asn	Ile	Leu	Gly	Leu	Arg	Asn	Asn	Ile	Tyr	Cys	Met
		115					120					125			
Ala	Gln	Leu	Leu	Asp	Asn	Ser	Asp	Thr	Ala	Glu	Pro	Thr	Lys	Ala	Gly
	130					135						140			

Arg Gly Ala Ser Gln	150	Pro Thr Pro Thr Pro Ala Ser Asp	155	Phe	160
145					
Gln Arg Lys Leu Glu Gly Cys Arg Phe Leu His Gly Tyr His Arg Phe	165	170	175		
Met His Ser Val Gly Arg Val Phe Ser Lys Trp Gly Glu Ser Pro Asn	180	185	190		
Arg Ser Arg Arg His Ser Pro His Gln Ala Leu Arg Lys Gly Val Arg	195	200	205		
Arg Thr Arg Pro Ser Arg Lys Gly Lys Arg Leu Met Thr Arg Gly Gln	210	215	220		
Leu Pro Arg					
225					

<210> 763  
 <211> 227  
 <212> PRT  
 <213> Homo sapiens

<400> 763

Ala Ala Ile Gly Ser Cys Ser Lys Glu Tyr Arg Val Leu Leu Gly Gln	1	5	10	15
Leu Gln Lys Gln Thr Asp Leu Met Gln Asp Thr Ser Arg Leu Leu Asp	20	25	30	
Pro Tyr Ile Arg Ile Gln Gly Leu Asp Val Pro Lys Leu Arg Glu His	35	40	45	
Cys Arg Glu Arg Pro Gly Ala Phe Pro Ser His Glu Thr Leu Arg Gly	50	55	60	
Leu Gly Arg Arg Gly Phe Leu Gln Thr Leu Asn Ala Thr Leu Gly Cys	65	70	75	80
Val Leu His Arg Leu Ala Asp Leu Glu Gln Arg Leu Pro Lys Ala Gln	85	90	95	
Asp Leu Glu Arg Ser Gly Leu Asn Ile Glu Asp Leu Glu Lys Leu Gln	100	105	110	
Met Ala Arg Pro Asn Ile Leu Gly Leu Arg Asn Asn Ile Tyr Cys Met	115	120	125	
Ala Gln Leu Leu Asp Asn Ser Asp Thr Ala Glu Pro Thr Lys Ala Gly	130	135	140	
Arg Gly Ala Ser Gln Pro Pro Thr Pro Thr Pro Ala Ser Asp Ala Phe	145	150	155	160
Gln Arg Lys Leu Glu Gly Cys Arg Phe Leu His Gly Tyr His Arg Phe	165	170	175	
Met His Ser Val Gly Arg Val Phe Ser Lys Trp Gly Glu Ser Pro Asn	180	185	190	
Arg Ser Arg Arg His Ser Pro His Gln Ala Leu Arg Lys Gly Val Arg	195	200	205	
Arg Thr Arg Pro Ser Arg Lys Gly Lys Arg Leu Met Thr Arg Gly Gln	210	215	220	
Leu Pro Arg				
225				

<210> 764  
 <211> 227  
 <212> PRT  
 <213> Homo sapiens

<400> 764

Ala Ala Ile Gly Ser Cys Ser Lys Glu Tyr Arg Val Leu Leu Gly Gln	1	5	10	15
Leu Gln Lys Gln Thr Asp Leu Met Gln Asp Thr Ser Arg Leu Leu Asp	20	25	30	
Pro Tyr Ile Arg Ile Gln Gly Leu Asp Val Pro Lys Leu Arg Glu His	35	40	45	
Cys Arg Glu Arg Pro Gly Ala Phe Pro Ser Glu Gln Thr Leu Arg Gly				



50	Leu Gly Arg Arg Gly	55	Phe Leu Gln Thr	60	Leu Asn Ala Thr	Leu Gly Cys
65	Val Leu His Arg	70	Leu Ala Asp Leu Glu	75	Gln Arg Leu Pro	Lys Ala Gln
	85		90		95	
	100		105		110	
	115		120		125	
	130		135		140	
	145		150		155	
	165		170		175	
	180		185		190	
	195		200		205	
	210		215		220	
	225					

<210> 765  
 <211> 227  
 <212> PRT  
 <213> Homo sapiens

<400> 765	Ala Ala Ile Gly Ser Cys Ser Lys Glu Tyr Arg Val Leu Leu Gly Gln
1	5 10 15
	Leu Gln Lys Gln Thr Asp Leu Met Gln Asp Thr Ser Arg Leu Leu Asp
	20 25 30
	Pro Tyr Ile Arg Ile Gln Gly Leu Asp Val Pro Lys Leu Arg Glu His
	35 40 45
	Cys Arg Glu Arg Pro Gly Ala Phe Pro Ser Glu Asn Thr Leu Arg Gly
	50 55 60
	Leu Gly Arg Arg Gly Phe Leu Gln Thr Leu Asn Ala Thr Leu Gly Cys
	65 70 75 80
	Val Leu His Arg Leu Ala Asp Leu Glu Gln Arg Leu Pro Lys Ala Gln
	85 90 95
	Asp Leu Glu Arg Ser Gly Leu Asn Ile Glu Asp Leu Glu Lys Leu Gln
	100 105 110
	Met Ala Arg Pro Asn Ile Leu Gly Leu Arg Asn Asn Ile Tyr Cys Met
	115 120 125
	Ala Gln Leu Leu Asp Asn Ser Asp Thr Ala Glu Pro Thr Lys Ala Gly
	130 135 140
	Arg Gly Ala Ser Gln Pro Pro Thr Pro Thr Pro Ala Ser Asp Ala Phe
	145 150 155 160
	Gln Arg Lys Leu Glu Gly Cys Arg Phe Leu His Gly Tyr His Arg Phe
	165 170 175
	Met His Ser Val Gly Arg Val Phe Ser Lys Trp Gly Glu Ser Pro Asn
	180 185 190
	Arg Ser Arg Arg His Ser Pro His Gln Ala Leu Arg Lys Gly Val Arg
	195 200 205
	Arg Thr Arg Pro Ser Arg Lys Gly Lys Arg Leu Met Thr Arg Gly Gln
	210 215 220
	Leu Pro Arg
	225

<210> 766  
 <211> 227

<212> PRT  
<213> Homo sapiens

<400> 766

Ala	Ala	Ile	Gly	Ser	Cys	Ser	Lys	Glu	Tyr	Arg	Val	Leu	Leu	Gly	Gln
1			5					10						15	
Leu	Gln	Lys	Gln	Thr	Asp	Leu	Met	Gln	Asp	Thr	Ser	Arg	Leu	Leu	Asp
		20						25					30		
Pro	Tyr	Ile	Arg	Ile	Gln	Gly	Leu	Asp	Val	Pro	Lys	Leu	Arg	Glu	His
	35					40						45			
Cys	Arg	Glu	Arg	Pro	Gly	Ala	Phe	Pro	Ser	Glu	His	Thr	Leu	Arg	Gly
	50				55					60					
Leu	Gly	Arg	Arg	Gly	Phe	Leu	Gln	Thr	Leu	Asn	Ala	Thr	Leu	Gly	Cys
65					70				75						80
Val	Leu	His	Arg	Leu	Ala	Asp	Leu	Glu	Gln	Arg	Leu	Pro	Lys	Ala	Gln
			85					90						95	
Asp	Leu	Glu	Arg	Ser	Gly	Leu	Asn	Ile	Glu	Asp	Leu	Glu	Lys	Leu	Gln
		100						105					110		
Met	Ala	Arg	Pro	Asn	Ile	Leu	Gly	Leu	Arg	Asn	Asn	Ile	Tyr	Cys	Met
	115						120						125		
Ala	Gln	Leu	Leu	Asp	Asn	Ser	Asp	Thr	Ala	Glu	Pro	Thr	Lys	Ala	Gly
	130					135					140				
Arg	Gly	Ala	Ser	Gln	Pro	Pro	Thr	Pro	Thr	Pro	Ala	Ser	Asp	Ala	Phe
145				150				155							160
Gln	Arg	Lys	Leu	Glu	Gly	Cys	Arg	Phe	Leu	His	Gly	Tyr	His	Arg	Phe
			165					170						175	
Met	His	Ser	Val	Gly	Arg	Val	Phe	Ser	Lys	Trp	Gly	Glu	Ser	Pro	Asn
		180					185					190			
Arg	Ser	Arg	Arg	His	Ser	Pro	His	Gln	Ala	Leu	Arg	Lys	Gly	Val	Arg
	195					200						205			
Arg	Thr	Arg	Pro	Ser	Arg	Lys	Gly	Lys	Arg	Leu	Met	Thr	Arg	Gly	Gln
	210					215					220				
Leu	Pro	Arg													
225															

<210> 767

<211> 227

<212> PRT

<213> Homo sapiens

<400> 767

Ala	Ala	Ile	Gly	Ser	Cys	Ser	Lys	Glu	Tyr	Arg	Val	Leu	Leu	Gly	Gln
1			5					10						15	
Leu	Gln	Lys	Gln	Thr	Asp	Leu	Met	Gln	Asp	Thr	Ser	Arg	Leu	Leu	Asp
		20						25					30		
Pro	Tyr	Ile	Arg	Ile	Gln	Gly	Leu	Asp	Val	Pro	Lys	Leu	Arg	Glu	His
	35					40						45			
Cys	Arg	Glu	Arg	Pro	Gly	Ala	Phe	Pro	Ser	Glu	Glu	Thr	Leu	His	Gly
	50				55					60					
Leu	Gly	Arg	Arg	Gly	Phe	Leu	Gln	Thr	Leu	Asn	Ala	Thr	Leu	Gly	Cys
65					70				75						80
Val	Leu	His	Arg	Leu	Ala	Asp	Leu	Glu	Gln	Arg	Leu	Pro	Lys	Ala	Gln
			85					90						95	
Asp	Leu	Glu	Arg	Ser	Gly	Leu	Asn	Ile	Glu	Asp	Leu	Glu	Lys	Leu	Gln
		100						105					110		
Met	Ala	Arg	Pro	Asn	Ile	Leu	Gly	Leu	Arg	Asn	Asn	Ile	Tyr	Cys	Met
	115						120						125		
Ala	Gln	Leu	Leu	Asp	Asn	Ser	Asp	Thr	Ala	Glu	Pro	Thr	Lys	Ala	Gly
	130					135					140				
Arg	Gly	Ala	Ser	Gln	Pro	Pro	Thr	Pro	Thr	Pro	Ala	Ser	Asp	Ala	Phe
145				150						155					160
Gln	Arg	Lys	Leu	Glu	Gly	Cys	Arg	Phe	Leu	His	Gly	Tyr	His	Arg	Phe
			165					170						175	

Met His Ser Val Gly 180 Val Phe Ser Lys Trp Gly Glu Ser 190 Asn  
 Arg Ser Arg Arg His Ser Pro His Gln Ala Leu Arg Lys Gly Val Arg  
 195 200 205  
 Arg Thr Arg Pro Ser Arg Lys Gly Lys Arg Leu Met Thr Arg Gly Gln  
 210 215 220  
 Leu Pro Arg  
 225

<210> 768  
 <211> 227  
 <212> PRT  
 <213> Homo sapiens

<400> 768  
 Ala Ala Ile Gly Ser Cys Ser Lys Glu Tyr Arg Val Leu Leu Gly Gln  
 1 5 10 15  
 Leu Gln Lys Gln Thr Asp Leu Met Gln Asp Thr Ser Arg Leu Leu Asp  
 20 25 30  
 Pro Tyr Ile Arg Ile Gln Gly Leu Asp Val Pro Lys Leu Arg Glu His  
 35 40 45  
 Cys Arg Glu Arg Pro Gly Ala Phe Pro Ser Glu Glu Thr Leu Gln Gly  
 50 55 60  
 Leu Gly Arg Arg Gly Phe Leu Gln Thr Leu Asn Ala Thr Leu Gly Cys  
 65 70 75 80  
 Val Leu His Arg Leu Ala Asp Leu Glu Gln Arg Leu Pro Lys Ala Gln  
 85 90 95  
 Asp Leu Glu Arg Ser Gly Leu Asn Ile Glu Asp Leu Glu Lys Leu Gln  
 100 105 110  
 Met Ala Arg Pro Asn Ile Leu Gly Leu Arg Asn Asn Ile Tyr Cys Met  
 115 120 125  
 Ala Gln Leu Leu Asp Asn Ser Asp Thr Ala Glu Pro Thr Lys Ala Gly  
 130 135 140  
 Arg Gly Ala Ser Gln Pro Pro Thr Pro Thr Pro Ala Ser Asp Ala Phe  
 145 150 155 160  
 Gln Arg Lys Leu Glu Gly Cys Arg Phe Leu His Gly Tyr His Arg Phe  
 165 170 175  
 Met His Ser Val Gly Arg Val Phe Ser Lys Trp Gly Glu Ser Pro Asn  
 180 185 190  
 Arg Ser Arg Arg His Ser Pro His Gln Ala Leu Arg Lys Gly Val Arg  
 195 200 205  
 Arg Thr Arg Pro Ser Arg Lys Gly Lys Arg Leu Met Thr Arg Gly Gln  
 210 215 220  
 Leu Pro Arg  
 225

<210> 769  
 <211> 227  
 <212> PRT  
 <213> Homo sapiens

<400> 769  
 Ala Ala Ile Gly Ser Cys Ser Lys Glu Tyr Arg Val Leu Leu Gly Gln  
 1 5 10 15  
 Leu Gln Lys Gln Thr Asp Leu Met Gln Asp Thr Ser Arg Leu Leu Asp  
 20 25 30  
 Pro Tyr Ile Arg Ile Gln Gly Leu Asp Val Pro Lys Leu Arg Glu His  
 35 40 45  
 Cys Arg Glu Arg Pro Gly Ala Phe Pro Ser Glu Glu Thr Leu Arg Gly  
 50 55 60  
 Val Gly Arg Arg Gly Phe Leu Gln Thr Leu Asn Ala Thr Leu Gly Cys  
 65 70 75 80  
 Val Leu His Arg Leu Ala Asp Leu Glu Gln Arg Leu Pro Lys Ala Gln

Asp	Leu	Glu	Arg	Ser	Gly	Leu	Asn	Ile	Glu	Asp	Leu	Glu	Lys	Leu	Gln
			100					105					110		
Met	Ala	Arg	Pro	Asn	Ile	Leu	Gly	Leu	Arg	Asn	Asn	Ile	Tyr	Cys	Met
		115					120					125			
Ala	Gln	Leu	Leu	Asp	Asn	Ser	Asp	Thr	Ala	Glu	Pro	Thr	Lys	Ala	Gly
	130					135					140				
Arg	Gly	Ala	Ser	Gln	Pro	Pro	Thr	Pro	Thr	Pro	Ala	Ser	Asp	Ala	Phe
145					150					155					160
Gln	Arg	Lys	Leu	Glu	Gly	Cys	Arg	Phe	Leu	His	Gly	Tyr	His	Arg	Phe
			165					170						175	
Met	His	Ser	Val	Gly	Arg	Val	Phe	Ser	Lys	Trp	Gly	Glu	Ser	Pro	Asn
		180						185					190		
Arg	Ser	Arg	Arg	His	Ser	Pro	His	Gln	Ala	Leu	Arg	Lys	Gly	Val	Arg
	195					200						205			
Arg	Thr	Arg	Pro	Ser	Arg	Lys	Gly	Lys	Arg	Leu	Met	Thr	Arg	Gly	Gln
	210					215					220				
Leu	Pro	Arg													
225															

<210> 770

<211> 227

<212> PRT

<213> Homo sapiens

<400> 770

Ala	Ala	Ile	Gly	Ser	Cys	Ser	Lys	Glu	Tyr	Arg	Val	Leu	Leu	Gly	Gln
1				5					10					15	
Leu	Gln	Lys	Gln	Thr	Asp	Leu	Met	Gln	Asp	Thr	Ser	Arg	Leu	Leu	Asp
		20						25					30		
Pro	Tyr	Ile	Arg	Ile	Gln	Gly	Leu	Asp	Val	Pro	Lys	Leu	Arg	Glu	His
	35					40						45			
Cys	Arg	Glu	Arg	Pro	Gly	Ala	Phe	Pro	Ser	Glu	Glu	Thr	Leu	Arg	Gly
	50					55					60				
Ile	Gly	Arg	Arg	Gly	Phe	Leu	Gln	Thr	Leu	Asn	Ala	Thr	Leu	Gly	Cys
65					70					75					80
Val	Leu	His	Arg	Leu	Ala	Asp	Leu	Glu	Gln	Arg	Leu	Pro	Lys	Ala	Gln
			85						90					95	
Asp	Leu	Glu	Arg	Ser	Gly	Leu	Asn	Ile	Glu	Asp	Leu	Glu	Lys	Leu	Gln
		100						105					110		
Met	Ala	Arg	Pro	Asn	Ile	Leu	Gly	Leu	Arg	Asn	Asn	Ile	Tyr	Cys	Met
	115						120					125			
Ala	Gln	Leu	Leu	Asp	Asn	Ser	Asp	Thr	Ala	Glu	Pro	Thr	Lys	Ala	Gly
	130					135						140			
Arg	Gly	Ala	Ser	Gln	Pro	Pro	Thr	Pro	Thr	Pro	Ala	Ser	Asp	Ala	Phe
145					150					155					160
Gln	Arg	Lys	Leu	Glu	Gly	Cys	Arg	Phe	Leu	His	Gly	Tyr	His	Arg	Phe
			165					170						175	
Met	His	Ser	Val	Gly	Arg	Val	Phe	Ser	Lys	Trp	Gly	Glu	Ser	Pro	Asn
		180						185					190		
Arg	Ser	Arg	Arg	His	Ser	Pro	His	Gln	Ala	Leu	Arg	Lys	Gly	Val	Arg
	195					200						205			
Arg	Thr	Arg	Pro	Ser	Arg	Lys	Gly	Lys	Arg	Leu	Met	Thr	Arg	Gly	Gln
	210					215					220				
Leu	Pro	Arg													
225															

<210> 771

<211> 227

<212> PRT

<213> Homo sapiens

<400> 771

Ala	Ala	Ile	Gly	Ser		Ser	Lys	Glu	Tyr	Arg	Val	Leu	Leu		Gln
1				5				10					15		
Leu	Gln	Lys	Gln	Thr	Asp	Leu	Met	Gln	Asp	Thr	Ser	Arg	Leu	Leu	Asp
		20						25					30		
Pro	Tyr	Ile	Arg	Ile	Gln	Gly	Leu	Asp	Val	Pro	Lys	Leu	Arg	Glu	His
		35					40					45			
Cys	Arg	Glu	Arg	Pro	Gly	Ala	Phe	Pro	Ser	Glu	Glu	Thr	Leu	Arg	Gly
	50					55					60				
Leu	Gly	Arg	Arg	Gly	Phe	Leu	Gln	Thr	Leu	Asn	Ala	Thr	Leu	Gly	Cys
65					70					75					80
Val	Leu	His	His	Leu	Ala	Asp	Leu	Glu	Gln	Arg	Leu	Pro	Lys	Ala	Gln
			85						90					95	
Asp	Leu	Glu	Arg	Ser	Gly	Leu	Asn	Ile	Glu	Asp	Leu	Glu	Lys	Leu	Gln
		100						105					110		
Met	Ala	Arg	Pro	Asn	Ile	Leu	Gly	Leu	Arg	Asn	Asn	Ile	Tyr	Cys	Met
	115						120					125			
Ala	Gln	Leu	Leu	Asp	Asn	Ser	Asp	Thr	Ala	Glu	Pro	Thr	Lys	Ala	Gly
	130					135					140				
Arg	Gly	Ala	Ser	Gln	Pro	Pro	Thr	Pro	Thr	Pro	Ala	Ser	Asp	Ala	Phe
145					150					155					160
Gln	Arg	Lys	Leu	Glu	Gly	Cys	Arg	Phe	Leu	His	Gly	Tyr	His	Arg	Phe
			165					170						175	
Met	His	Ser	Val	Gly	Arg	Val	Phe	Ser	Lys	Trp	Gly	Glu	Ser	Pro	Asn
		180					185					190			
Arg	Ser	Arg	Arg	His	Ser	Pro	His	Gln	Ala	Leu	Arg	Lys	Gly	Val	Arg
	195					200						205			
Arg	Thr	Arg	Pro	Ser	Arg	Lys	Gly	Lys	Arg	Leu	Met	Thr	Arg	Gly	Gln
	210					215					220				
Leu	Pro	Arg													
225															

<210> 772

<211> 227

<212> PRT

<213> Homo sapiens

<400> 772

Ala	Ala	Ile	Gly	Ser	Cys	Ser	Lys	Glu	Tyr	Arg	Val	Leu	Leu	Gly	Gln
1				5				10					15		
Leu	Gln	Lys	Gln	Thr	Asp	Leu	Met	Gln	Asp	Thr	Ser	Arg	Leu	Leu	Asp
		20						25					30		
Pro	Tyr	Ile	Arg	Ile	Gln	Gly	Leu	Asp	Val	Pro	Lys	Leu	Arg	Glu	His
		35					40					45			
Cys	Arg	Glu	Arg	Pro	Gly	Ala	Phe	Pro	Ser	Glu	Glu	Thr	Leu	Arg	Gly
	50					55					60				
Leu	Gly	Arg	Arg	Gly	Phe	Leu	Gln	Thr	Leu	Asn	Ala	Thr	Leu	Gly	Cys
65					70					75					80
Val	Leu	His	Gln	Leu	Ala	Asp	Leu	Glu	Gln	Arg	Leu	Pro	Lys	Ala	Gln
			85						90					95	
Asp	Leu	Glu	Arg	Ser	Gly	Leu	Asn	Ile	Glu	Asp	Leu	Glu	Lys	Leu	Gln
		100						105					110		
Met	Ala	Arg	Pro	Asn	Ile	Leu	Gly	Leu	Arg	Asn	Asn	Ile	Tyr	Cys	Met
	115						120					125			
Ala	Gln	Leu	Leu	Asp	Asn	Ser	Asp	Thr	Ala	Glu	Pro	Thr	Lys	Ala	Gly
	130					135					140				
Arg	Gly	Ala	Ser	Gln	Pro	Pro	Thr	Pro	Thr	Pro	Ala	Ser	Asp	Ala	Phe
145					150					155					160
Gln	Arg	Lys	Leu	Glu	Gly	Cys	Arg	Phe	Leu	His	Gly	Tyr	His	Arg	Phe
			165					170						175	
Met	His	Ser	Val	Gly	Arg	Val	Phe	Ser	Lys	Trp	Gly	Glu	Ser	Pro	Asn
		180					185					190			
Arg	Ser	Arg	Arg	His	Ser	Pro	His	Gln	Ala	Leu	Arg	Lys	Gly	Val	Arg
	195					200						205			

Arg Thr Arg Pro Ser Lys Gly Lys Arg Leu Met Thr Arg Gln  
 210 215 220  
 Leu Pro Arg  
 225

<210> 773  
 <211> 227  
 <212> PRT  
 <213> Homo sapiens

<400> 773  
 Ala Ala Ile Gly Ser Cys Ser Lys Glu Tyr Arg Val Leu Leu Gly Gln  
 1 5 10 15  
 Leu Gln Lys Gln Thr Asp Leu Met Gln Asp Thr Ser Arg Leu Leu Asp  
 20 25 30  
 Pro Tyr Ile Arg Ile Gln Gly Leu Asp Val Pro Lys Leu Arg Glu His  
 35 40 45  
 Cys Arg Glu Arg Pro Gly Ala Phe Pro Ser Glu Glu Thr Leu Arg Gly  
 50 55 60  
 Leu Gly Arg Arg Gly Phe Leu Gln Thr Leu Asn Ala Thr Leu Gly Cys  
 65 70 75 80  
 Val Leu His Arg Leu Ala Gln Leu Glu Gln Arg Leu Pro Lys Ala Gln  
 85 90 95  
 Asp Leu Glu Arg Ser Gly Leu Asn Ile Glu Asp Leu Glu Lys Leu Gln  
 100 105 110  
 Met Ala Arg Pro Asn Ile Leu Gly Leu Arg Asn Asn Ile Tyr Cys Met  
 115 120 125  
 Ala Gln Leu Leu Asp Asn Ser Asp Thr Ala Glu Pro Thr Lys Ala Gly  
 130 135 140  
 Arg Gly Ala Ser Gln Pro Pro Thr Pro Thr Pro Ala Ser Asp Ala Phe  
 145 150 155 160  
 Gln Arg Lys Leu Glu Gly Cys Arg Phe Leu His Gly Tyr His Arg Phe  
 165 170 175  
 Met His Ser Val Gly Arg Val Phe Ser Lys Trp Gly Glu Ser Pro Asn  
 180 185 190  
 Arg Ser Arg Arg His Ser Pro His Gln Ala Leu Arg Lys Gly Val Arg  
 195 200 205  
 Arg Thr Arg Pro Ser Arg Lys Gly Lys Arg Leu Met Thr Arg Gly Gln  
 210 215 220  
 Leu Pro Arg  
 225

<210> 774  
 <211> 227  
 <212> PRT  
 <213> Homo sapiens

<400> 774  
 Ala Ala Ile Gly Ser Cys Ser Lys Glu Tyr Arg Val Leu Leu Gly Gln  
 1 5 10 15  
 Leu Gln Lys Gln Thr Asp Leu Met Gln Asp Thr Ser Arg Leu Leu Asp  
 20 25 30  
 Pro Tyr Ile Arg Ile Gln Gly Leu Asp Val Pro Lys Leu Arg Glu His  
 35 40 45  
 Cys Arg Glu Arg Pro Gly Ala Phe Pro Ser Glu Glu Thr Leu Arg Gly  
 50 55 60  
 Leu Gly Arg Arg Gly Phe Leu Gln Thr Leu Asn Ala Thr Leu Gly Cys  
 65 70 75 80  
 Val Leu His Arg Leu Ala Asn Leu Glu Gln Arg Leu Pro Lys Ala Gln  
 85 90 95  
 Asp Leu Glu Arg Ser Gly Leu Asn Ile Glu Asp Leu Glu Lys Leu Gln  
 100 105 110  
 Met Ala Arg Pro Asn Ile Leu Gly Leu Arg Asn Asn Ile Tyr Cys Met

115	120	125
Ala Gln Leu Leu Asp Asn Ser Asp Thr Ala Glu Pro Thr Lys Ala Gly		
130	135	140
Arg Gly Ala Ser Gln Pro Pro Thr Pro Thr Pro Ala Ser Asp Ala Phe		
145	150	155
Gln Arg Lys Leu Glu Gly Cys Arg Phe Leu His Gly Tyr His Arg Phe		
	165	170
Met His Ser Val Gly Arg Val Phe Ser Lys Trp Gly Glu Ser Pro Asn		
	180	185
Arg Ser Arg Arg His Ser Pro His Gln Ala Leu Arg Lys Gly Val Arg		
	195	200
Arg Thr Arg Pro Ser Arg Lys Gly Lys Arg Leu Met Thr Arg Gly Gln		
	210	215
Leu Pro Arg		220
225		

<210> 775  
 <211> 227  
 <212> PRT  
 <213> Homo sapiens

<400> 775
Ala Ala Ile Gly Ser Cys Ser Lys Glu Tyr Arg Val Leu Leu Gly Gln
1 5 10 15
Leu Gln Lys Gln Thr Asp Leu Met Gln Asp Thr Ser Arg Leu Leu Asp
20 25 30
Pro Tyr Ile Arg Ile Gln Gly Leu Asp Val Pro Lys Leu Arg Glu His
35 40 45
Cys Arg Glu Arg Pro Gly Ala Phe Pro Ser Glu Glu Thr Leu Arg Gly
50 55 60
Leu Gly Arg Arg Gly Phe Leu Gln Thr Leu Asn Ala Thr Leu Gly Cys
65 70 75 80
Val Leu His Arg Leu Ala Asp Leu Gln Gln Arg Leu Pro Lys Ala Gln
85 90 95
Asp Leu Glu Arg Ser Gly Leu Asn Ile Glu Asp Leu Glu Lys Leu Gln
100 105 110
Met Ala Arg Pro Asn Ile Leu Gly Leu Arg Asn Asn Ile Tyr Cys Met
115 120 125
Ala Gln Leu Leu Asp Asn Ser Asp Thr Ala Glu Pro Thr Lys Ala Gly
130 135 140
Arg Gly Ala Ser Gln Pro Pro Thr Pro Thr Pro Ala Ser Asp Ala Phe
145 150 155 160
Gln Arg Lys Leu Glu Gly Cys Arg Phe Leu His Gly Tyr His Arg Phe
165 170 175
Met His Ser Val Gly Arg Val Phe Ser Lys Trp Gly Glu Ser Pro Asn
180 185 190
Arg Ser Arg Arg His Ser Pro His Gln Ala Leu Arg Lys Gly Val Arg
195 200 205
Arg Thr Arg Pro Ser Arg Lys Gly Lys Arg Leu Met Thr Arg Gly Gln
210 215 220
Leu Pro Arg
225

<210> 776  
 <211> 227  
 <212> PRT  
 <213> Homo sapiens

<400> 776
Ala Ala Ile Gly Ser Cys Ser Lys Glu Tyr Arg Val Leu Leu Gly Gln
1 5 10 15
Leu Gln Lys Gln Thr Asp Leu Met Gln Asp Thr Ser Arg Leu Leu Asp
20 25 30

Pro Tyr Ile Arg Ile Gly Leu Asp Val Pro Lys Leu Arg His  
 35 40 45  
 Cys Arg Glu Arg Pro Gly Ala Phe Pro Ser Glu Glu Thr Leu Arg Gly  
 50 55 60  
 Leu Gly Arg Arg Gly Phe Leu Gln Thr Leu Asn Ala Thr Leu Gly Cys  
 65 70 75 80  
 Val Leu His Arg Leu Ala Asp Leu Asn Gln Arg Leu Pro Lys Ala Gln  
 85 90 95  
 Asp Leu Glu Arg Ser Gly Leu Asn Ile Glu Asp Leu Glu Lys Leu Gln  
 100 105 110  
 Met Ala Arg Pro Asn Ile Leu Gly Leu Arg Asn Asn Ile Tyr Cys Met  
 115 120 125  
 Ala Gln Leu Leu Asp Asn Ser Asp Thr Ala Glu Pro Thr Lys Ala Gly  
 130 135 140  
 Arg Gly Ala Ser Gln Pro Pro Thr Pro Thr Pro Ala Ser Asp Ala Phe  
 145 150 155 160  
 Gln Arg Lys Leu Glu Gly Cys Arg Phe Leu His Gly Tyr His Arg Phe  
 165 170 175  
 Met His Ser Val Gly Arg Val Phe Ser Lys Trp Gly Glu Ser Pro Asn  
 180 185 190  
 Arg Ser Arg Arg His Ser Pro His Gln Ala Leu Arg Lys Gly Val Arg  
 195 200 205  
 Arg Thr Arg Pro Ser Arg Lys Gly Lys Arg Leu Met Thr Arg Gly Gln  
 210 215 220  
 Leu Pro Arg  
 225

<210> 777

<211> 227

<212> PRT

<213> Homo sapiens

<400> 777

Ala Ala Ile Gly Ser Cys Ser Lys Glu Tyr Arg Val Leu Leu Gly Gln  
 1 5 10 15  
 Leu Gln Lys Gln Thr Asp Leu Met Gln Asp Thr Ser Arg Leu Leu Asp  
 20 25 30  
 Pro Tyr Ile Arg Ile Gln Gly Leu Asp Val Pro Lys Leu Arg Glu His  
 35 40 45  
 Cys Arg Glu Arg Pro Gly Ala Phe Pro Ser Glu Glu Thr Leu Arg Gly  
 50 55 60  
 Leu Gly Arg Arg Gly Phe Leu Gln Thr Leu Asn Ala Thr Leu Gly Cys  
 65 70 75 80  
 Val Leu His Arg Leu Ala Asp Leu His Gln Arg Leu Pro Lys Ala Gln  
 85 90 95  
 Asp Leu Glu Arg Ser Gly Leu Asn Ile Glu Asp Leu Glu Lys Leu Gln  
 100 105 110  
 Met Ala Arg Pro Asn Ile Leu Gly Leu Arg Asn Asn Ile Tyr Cys Met  
 115 120 125  
 Ala Gln Leu Leu Asp Asn Ser Asp Thr Ala Glu Pro Thr Lys Ala Gly  
 130 135 140  
 Arg Gly Ala Ser Gln Pro Pro Thr Pro Thr Pro Ala Ser Asp Ala Phe  
 145 150 155 160  
 Gln Arg Lys Leu Glu Gly Cys Arg Phe Leu His Gly Tyr His Arg Phe  
 165 170 175  
 Met His Ser Val Gly Arg Val Phe Ser Lys Trp Gly Glu Ser Pro Asn  
 180 185 190  
 Arg Ser Arg Arg His Ser Pro His Gln Ala Leu Arg Lys Gly Val Arg  
 195 200 205  
 Arg Thr Arg Pro Ser Arg Lys Gly Lys Arg Leu Met Thr Arg Gly Gln  
 210 215 220  
 Leu Pro Arg  
 225



<210> 778  
 <211> 227  
 <212> PRT  
 <213> Homo sapiens

<400> 778  
 Ala Ala Ile Gly Ser Cys Ser Lys Glu Tyr Arg Val Leu Leu Gly Gln  
 1 5 10 15  
 Leu Gln Lys Gln Thr Asp Leu Met Gln Asp Thr Ser Arg Leu Leu Asp  
 20 25 30  
 Pro Tyr Ile Arg Ile Gln Gly Leu Asp Val Pro Lys Leu Arg Glu His  
 35 40 45  
 Cys Arg Glu Arg Pro Gly Ala Phe Pro Ser Glu Glu Thr Leu Arg Gly  
 50 55 60  
 Leu Gly Arg Arg Gly Phe Leu Gln Thr Leu Asn Ala Thr Leu Gly Cys  
 65 70 75 80  
 Val Leu His Arg Leu Ala Asp Leu Glu Gln His Leu Pro Lys Ala Gln  
 85 90 95  
 Asp Leu Glu Arg Ser Gly Leu Asn Ile Glu Asp Leu Glu Lys Leu Gln  
 100 105 110  
 Met Ala Arg Pro Asn Ile Leu Gly Leu Arg Asn Asn Ile Tyr Cys Met  
 115 120 125  
 Ala Gln Leu Leu Asp Asn Ser Asp Thr Ala Glu Pro Thr Lys Ala Gly  
 130 135 140  
 Arg Gly Ala Ser Gln Pro Pro Thr Pro Thr Pro Ala Ser Asp Ala Phe  
 145 150 155 160  
 Gln Arg Lys Leu Glu Gly Cys Arg Phe Leu His Gly Tyr His Arg Phe  
 165 170 175  
 Met His Ser Val Gly Arg Val Phe Ser Lys Trp Gly Glu Ser Pro Asn  
 180 185 190  
 Arg Ser Arg Arg His Ser Pro His Gln Ala Leu Arg Lys Gly Val Arg  
 195 200 205  
 Arg Thr Arg Pro Ser Arg Lys Gly Lys Arg Leu Met Thr Arg Gly Gln  
 210 215 220  
 Leu Pro Arg  
 225

<210> 779  
 <211> 227  
 <212> PRT  
 <213> Homo sapiens

<400> 779  
 Ala Ala Ile Gly Ser Cys Ser Lys Glu Tyr Arg Val Leu Leu Gly Gln  
 1 5 10 15  
 Leu Gln Lys Gln Thr Asp Leu Met Gln Asp Thr Ser Arg Leu Leu Asp  
 20 25 30  
 Pro Tyr Ile Arg Ile Gln Gly Leu Asp Val Pro Lys Leu Arg Glu His  
 35 40 45  
 Cys Arg Glu Arg Pro Gly Ala Phe Pro Ser Glu Glu Thr Leu Arg Gly  
 50 55 60  
 Leu Gly Arg Arg Gly Phe Leu Gln Thr Leu Asn Ala Thr Leu Gly Cys  
 65 70 75 80  
 Val Leu His Arg Leu Ala Asp Leu Glu Gln Gln Leu Pro Lys Ala Gln  
 85 90 95  
 Asp Leu Glu Arg Ser Gly Leu Asn Ile Glu Asp Leu Glu Lys Leu Gln  
 100 105 110  
 Met Ala Arg Pro Asn Ile Leu Gly Leu Arg Asn Asn Ile Tyr Cys Met  
 115 120 125  
 Ala Gln Leu Leu Asp Asn Ser Asp Thr Ala Glu Pro Thr Lys Ala Gly  
 130 135 140  
 Arg Gly Ala Ser Gln Pro Pro Thr Pro Thr Pro Ala Ser Asp Ala Phe

145  
 Gln Arg Lys Leu Glu Gly Cys Arg Phe Leu His Gly Tyr His Arg Phe  
 165 170 175  
 Met His Ser Val Gly Arg Val Phe Ser Lys Trp Gly Glu Ser Pro Asn  
 180 185 190  
 Arg Ser Arg Arg His Ser Pro His Gln Ala Leu Arg Lys Gly Val Arg  
 195 200 205  
 Arg Thr Arg Pro Ser Arg Lys Gly Lys Arg Leu Met Thr Arg Gly Gln  
 210 215 220  
 Leu Pro Arg  
 225

<210> 780  
 <211> 227  
 <212> PRT  
 <213> Homo sapiens

<400> 780  
 Ala Ala Ile Gly Ser Cys Ser Lys Glu Tyr Arg Val Leu Leu Gly Gln  
 1 5 10 15  
 Leu Gln Lys Gln Thr Asp Leu Met Gln Asp Thr Ser Arg Leu Leu Asp  
 20 25 30  
 Pro Tyr Ile Arg Ile Gln Gly Leu Asp Val Pro Lys Leu Arg Glu His  
 35 40 45  
 Cys Arg Glu Arg Pro Gly Ala Phe Pro Ser Glu Glu Thr Leu Arg Gly  
 50 55 60  
 Leu Gly Arg Arg Gly Phe Leu Gln Thr Leu Asn Ala Thr Leu Gly Cys  
 65 70 75 80  
 Val Leu His Arg Leu Ala Asp Leu Glu Gln Arg Leu Pro Gln Ala Gln  
 85 90 95  
 Asp Leu Glu Arg Ser Gly Leu Asn Ile Glu Asp Leu Glu Lys Leu Gln  
 100 105 110  
 Met Ala Arg Pro Asn Ile Leu Gly Leu Arg Asn Asn Ile Tyr Cys Met  
 115 120 125  
 Ala Gln Leu Leu Asp Asn Ser Asp Thr Ala Glu Pro Thr Lys Ala Gly  
 130 135 140  
 Arg Gly Ala Ser Gln Pro Thr Pro Thr Pro Ala Ser Asp Ala Phe  
 145 150 155 160  
 Gln Arg Lys Leu Glu Gly Cys Arg Phe Leu His Gly Tyr His Arg Phe  
 165 170 175  
 Met His Ser Val Gly Arg Val Phe Ser Lys Trp Gly Glu Ser Pro Asn  
 180 185 190  
 Arg Ser Arg Arg His Ser Pro His Gln Ala Leu Arg Lys Gly Val Arg  
 195 200 205  
 Arg Thr Arg Pro Ser Arg Lys Gly Lys Arg Leu Met Thr Arg Gly Gln  
 210 215 220  
 Leu Pro Arg  
 225

<210> 781  
 <211> 227  
 <212> PRT  
 <213> Homo sapiens

<400> 781  
 Ala Ala Ile Gly Ser Cys Ser Lys Glu Tyr Arg Val Leu Leu Gly Gln  
 1 5 10 15  
 Leu Gln Lys Gln Thr Asp Leu Met Gln Asp Thr Ser Arg Leu Leu Asp  
 20 25 30  
 Pro Tyr Ile Arg Ile Gln Gly Leu Asp Val Pro Lys Leu Arg Glu His  
 35 40 45  
 Cys Arg Glu Arg Pro Gly Ala Phe Pro Ser Glu Glu Thr Leu Arg Gly  
 50 55 60

Leu Gly Arg Arg Gly 70 Leu Gln Thr Leu Asn Ala Thr Leu 80 Cys  
 65 75 80  
 Val Leu His Arg Leu Ala Asp Leu Glu Gln Arg Leu Pro Asn Ala Gln  
 85 90 95  
 Asp Leu Glu Arg Ser Gly Leu Asn Ile Glu Asp Leu Glu Lys Leu Gln  
 100 105 110  
 Met Ala Arg Pro Asn Ile Leu Gly Leu Arg Asn Asn Ile Tyr Cys Met  
 115 120 125  
 Ala Gln Leu Leu Asp Asn Ser Asp Thr Ala Glu Pro Thr Lys Ala Gly  
 130 135 140  
 Arg Gly Ala Ser Gln Pro Pro Thr Pro Thr Pro Ala Ser Asp Ala Phe  
 145 150 155 160  
 Gln Arg Lys Leu Glu Gly Cys Arg Phe Leu His Gly Tyr His Arg Phe  
 165 170 175  
 Met His Ser Val Gly Arg Val Phe Ser Lys Trp Gly Glu Ser Pro Asn  
 180 185 190  
 Arg Ser Arg Arg His Ser Pro His Gln Ala Leu Arg Lys Gly Val Arg  
 195 200 205  
 Arg Thr Arg Pro Ser Arg Lys Gly Lys Arg Leu Met Thr Arg Gly Gln  
 210 215 220  
 Leu Pro Arg  
 225

<210> 782  
 <211> 227  
 <212> PRT  
 <213> Homo sapiens

<400> 782  
 Ala Ala Ile Gly Ser Cys Ser Lys Glu Tyr Arg Val Leu Leu Gly Gln  
 1 5 10 15  
 Leu Gln Lys Gln Thr Asp Leu Met Gln Asp Thr Ser Arg Leu Leu Asp  
 20 25 30  
 Pro Tyr Ile Arg Ile Gln Gly Leu Asp Val Pro Lys Leu Arg Glu His  
 35 40 45  
 Cys Arg Glu Arg Pro Gly Ala Phe Pro Ser Glu Glu Thr Leu Arg Gly  
 50 55 60  
 Leu Gly Arg Arg Gly Phe Leu Gln Thr Leu Asn Ala Thr Leu Gly Cys  
 65 70 75 80  
 Val Leu His Arg Leu Ala Asp Leu Glu Gln Arg Leu Pro Lys Ala Gln  
 85 90 95  
 Gln Leu Glu Arg Ser Gly Leu Asn Ile Glu Asp Leu Glu Lys Leu Gln  
 100 105 110  
 Met Ala Arg Pro Asn Ile Leu Gly Leu Arg Asn Asn Ile Tyr Cys Met  
 115 120 125  
 Ala Gln Leu Leu Asp Asn Ser Asp Thr Ala Glu Pro Thr Lys Ala Gly  
 130 135 140  
 Arg Gly Ala Ser Gln Pro Pro Thr Pro Thr Pro Ala Ser Asp Ala Phe  
 145 150 155 160  
 Gln Arg Lys Leu Glu Gly Cys Arg Phe Leu His Gly Tyr His Arg Phe  
 165 170 175  
 Met His Ser Val Gly Arg Val Phe Ser Lys Trp Gly Glu Ser Pro Asn  
 180 185 190  
 Arg Ser Arg Arg His Ser Pro His Gln Ala Leu Arg Lys Gly Val Arg  
 195 200 205  
 Arg Thr Arg Pro Ser Arg Lys Gly Lys Arg Leu Met Thr Arg Gly Gln  
 210 215 220  
 Leu Pro Arg  
 225

<210> 783  
 <211> 227  
 <212> PRT

<213> Homo sapiens

<400> 783

Ala	Ala	Ile	Gly	Ser	Cys	Ser	Lys	Glu	Tyr	Arg	Val	Leu	Leu	Gly	Gln
1				5					10					15	
Leu	Gln	Lys	Gln	Thr	Asp	Leu	Met	Gln	Asp	Thr	Ser	Arg	Leu	Leu	Asp
			20					25					30		
Pro	Tyr	Ile	Arg	Ile	Gln	Gly	Leu	Asp	Val	Pro	Lys	Leu	Arg	Glu	His
		35					40					45			
Cys	Arg	Glu	Arg	Pro	Gly	Ala	Phe	Pro	Ser	Glu	Glu	Thr	Leu	Arg	Gly
	50					55				60					
Leu	Gly	Arg	Arg	Gly	Phe	Leu	Gln	Thr	Leu	Asn	Ala	Thr	Leu	Gly	Cys
65					70				75						80
Val	Leu	His	Arg	Leu	Ala	Asp	Leu	Glu	Gln	Arg	Leu	Pro	Lys	Ala	Gln
			85						90					95	
Asn	Leu	Glu	Arg	Ser	Gly	Leu	Asn	Ile	Glu	Asp	Leu	Glu	Lys	Leu	Gln
			100					105					110		
Met	Ala	Arg	Pro	Asn	Ile	Leu	Gly	Leu	Arg	Asn	Asn	Ile	Tyr	Cys	Met
		115					120					125			
Ala	Gln	Leu	Leu	Asp	Asn	Ser	Asp	Thr	Ala	Glu	Pro	Thr	Lys	Ala	Gly
	130						135				140				
Arg	Gly	Ala	Ser	Gln	Pro	Pro	Thr	Pro	Thr	Pro	Ala	Ser	Asp	Ala	Phe
145					150				155						160
Gln	Arg	Lys	Leu	Glu	Gly	Cys	Arg	Phe	Leu	His	Gly	Tyr	His	Arg	Phe
			165					170					175		
Met	His	Ser	Val	Gly	Arg	Val	Phe	Ser	Lys	Trp	Gly	Glu	Ser	Pro	Asn
			180					185					190		
Arg	Ser	Arg	Arg	His	Ser	Pro	His	Gln	Ala	Leu	Arg	Lys	Gly	Val	Arg
		195				200						205			
Arg	Thr	Arg	Pro	Ser	Arg	Lys	Gly	Lys	Arg	Leu	Met	Thr	Arg	Gly	Gln
	210					215					220				
Leu	Pro	Arg													
225															

<210> 784

<211> 227

<212> PRT

<213> Homo sapiens

<400> 784

Ala	Ala	Ile	Gly	Ser	Cys	Ser	Lys	Glu	Tyr	Arg	Val	Leu	Leu	Gly	Gln
1				5					10					15	
Leu	Gln	Lys	Gln	Thr	Asp	Leu	Met	Gln	Asp	Thr	Ser	Arg	Leu	Leu	Asp
			20					25					30		
Pro	Tyr	Ile	Arg	Ile	Gln	Gly	Leu	Asp	Val	Pro	Lys	Leu	Arg	Glu	His
		35					40					45			
Cys	Arg	Glu	Arg	Pro	Gly	Ala	Phe	Pro	Ser	Glu	Glu	Thr	Leu	Arg	Gly
	50					55				60					
Leu	Gly	Arg	Arg	Gly	Phe	Leu	Gln	Thr	Leu	Asn	Ala	Thr	Leu	Gly	Cys
65					70				75						80
Val	Leu	His	Arg	Leu	Ala	Asp	Leu	Glu	Gln	Arg	Leu	Pro	Lys	Ala	Gln
			85						90					95	
Asp	Leu	Gln	Arg	Ser	Gly	Leu	Asn	Ile	Glu	Asp	Leu	Glu	Lys	Leu	Gln
			100					105					110		
Met	Ala	Arg	Pro	Asn	Ile	Leu	Gly	Leu	Arg	Asn	Asn	Ile	Tyr	Cys	Met
		115					120					125			
Ala	Gln	Leu	Leu	Asp	Asn	Ser	Asp	Thr	Ala	Glu	Pro	Thr	Lys	Ala	Gly
	130						135				140				
Arg	Gly	Ala	Ser	Gln	Pro	Pro	Thr	Pro	Thr	Pro	Ala	Ser	Asp	Ala	Phe
145					150				155						160
Gln	Arg	Lys	Leu	Glu	Gly	Cys	Arg	Phe	Leu	His	Gly	Tyr	His	Arg	Phe
			165					170					175		
Met	His	Ser	Val	Gly	Arg	Val	Phe	Ser	Lys	Trp	Gly	Glu	Ser	Pro	Asn



Asp Leu His Arg Ser Leu Asn Ile Glu Asp Leu Glu Lys Gln  
 100 105 110  
 Met Ala Arg Pro Asn Ile Leu Gly Leu Arg Asn Asn Ile Tyr Cys Met  
 115 120 125  
 Ala Gln Leu Leu Asp Asn Ser Asp Thr Ala Glu Pro Thr Lys Ala Gly  
 130 135 140  
 Arg Gly Ala Ser Gln Pro Thr Pro Thr Pro Ala Ser Asp Ala Phe  
 145 150 155 160  
 Gln Arg Lys Leu Glu Gly Cys Arg Phe Leu His Gly Tyr His Arg Phe  
 165 170 175  
 Met His Ser Val Gly Arg Val Phe Ser Lys Trp Gly Glu Ser Pro Asn  
 180 185 190  
 Arg Ser Arg Arg His Ser Pro His Gln Ala Leu Arg Lys Gly Val Arg  
 195 200 205  
 Arg Thr Arg Pro Ser Arg Lys Gly Lys Arg Leu Met Thr Arg Gly Gln  
 210 215 220  
 Leu Pro Arg  
 225

<210> 787

<211> 227

<212> PRT

<213> Homo sapiens

<400> 787

Ala Ala Ile Gly Ser Cys Ser Lys Glu Tyr Arg Val Leu Leu Gly Gln  
 1 5 10 15  
 Leu Gln Lys Gln Thr Asp Leu Met Gln Asp Thr Ser Arg Leu Leu Asp  
 20 25 30  
 Pro Tyr Ile Arg Ile Gln Gly Leu Asp Val Pro Lys Leu Arg Glu His  
 35 40 45  
 Cys Arg Glu Arg Pro Gly Ala Phe Pro Ser Glu Glu Thr Leu Arg Gly  
 50 55 60  
 Leu Gly Arg Arg Gly Phe Leu Gln Thr Leu Asn Ala Thr Leu Gly Cys  
 65 70 75 80  
 Val Leu His Arg Leu Ala Asp Leu Glu Gln Arg Leu Pro Lys Ala Gln  
 85 90 95  
 Asp Leu Glu His Ser Gly Leu Asn Ile Glu Asp Leu Glu Lys Leu Gln  
 100 105 110  
 Met Ala Arg Pro Asn Ile Leu Gly Leu Arg Asn Asn Ile Tyr Cys Met  
 115 120 125  
 Ala Gln Leu Leu Asp Asn Ser Asp Thr Ala Glu Pro Thr Lys Ala Gly  
 130 135 140  
 Arg Gly Ala Ser Gln Pro Thr Pro Thr Pro Ala Ser Asp Ala Phe  
 145 150 155 160  
 Gln Arg Lys Leu Glu Gly Cys Arg Phe Leu His Gly Tyr His Arg Phe  
 165 170 175  
 Met His Ser Val Gly Arg Val Phe Ser Lys Trp Gly Glu Ser Pro Asn  
 180 185 190  
 Arg Ser Arg Arg His Ser Pro His Gln Ala Leu Arg Lys Gly Val Arg  
 195 200 205  
 Arg Thr Arg Pro Ser Arg Lys Gly Lys Arg Leu Met Thr Arg Gly Gln  
 210 215 220  
 Leu Pro Arg  
 225

<210> 788

<211> 227

<212> PRT

<213> Homo sapiens

<400> 788

Ala Ala Ile Gly Ser Cys Ser Lys Glu Tyr Arg Val Leu Leu Gly Gln

1	5	10		
Leu Gln Lys	Gln Thr Asp	Leu Met Gln	Asp Thr Ser	Arg Leu Leu Asp
	20	25		30
Pro Tyr Ile	Arg Ile Gln	Gly Leu Asp	Val Pro Lys	Leu Arg Glu His
	35	40		45
Cys Arg Glu	Arg Pro Gly	Ala Phe Pro	Ser Glu Glu	Thr Leu Arg Gly
	50	55		60
Leu Gly Arg	Arg Gly Phe	Leu Gln Thr	Leu Asn Ala	Thr Leu Gly Cys
65		70		75
Val Leu His	Arg Leu Ala	Asp Leu Glu	Gln Arg Leu	Pro Lys Ala Gln
	85	90		95
Asp Leu Glu	Gln Ser Gly	Leu Asn Ile	Glu Asp Leu	Glu Lys Leu Gln
	100	105		110
Met Ala Arg	Pro Asn Ile	Leu Gly Leu	Arg Asn Asn	Ile Tyr Cys Met
	115	120		125
Ala Gln Leu	Leu Asp Asn	Ser Asp Thr	Ala Glu Pro	Thr Lys Ala Gly
	130	135		140
Arg Gly Ala	Ser Gln Pro	Thr Pro Thr	Pro Ala Ser	Asp Ala Phe
145		150		155
Gln Arg Lys	Leu Glu Gly	Cys Arg Phe	Leu His Gly	Tyr His Arg Phe
	165	170		175
Met His Ser	Val Gly Arg	Val Phe Ser	Lys Trp Gly	Glu Ser Pro Asn
	180	185		190
Arg Ser Arg	Arg His Ser	Pro His Gln	Ala Leu Arg	Lys Gly Val Arg
	195	200		205
Arg Thr Arg	Pro Ser Arg	Lys Gly Lys	Arg Leu Met	Thr Arg Gly Gln
	210	215		220
Leu Pro Arg				
225				

<210> 789

<211> 227

<212> PRT

<213> Homo sapiens

<400> 789

Ala Ala Ile	Gly Ser Cys	Ser Lys Glu	Tyr Arg Val	Leu Leu Gly	Gln
1	5		10		15
Leu Gln Lys	Gln Thr Asp	Leu Met Gln	Asp Thr Ser	Arg Leu Leu	Asp
	20	25		30	
Pro Tyr Ile	Arg Ile Gln	Gly Leu Asp	Val Pro Lys	Leu Arg Glu	His
	35	40		45	
Cys Arg Glu	Arg Pro Gly	Ala Phe Pro	Ser Glu Glu	Thr Leu Arg	Gly
	50	55		60	
Leu Gly Arg	Arg Gly Phe	Leu Gln Thr	Leu Asn Ala	Thr Leu Gly	Cys
65		70		75	80
Val Leu His	Arg Leu Ala	Asp Leu Glu	Gln Arg Leu	Pro Lys Ala	Gln
	85	90		95	
Asp Leu Glu	Arg Ser Gly	Val Asn Ile	Glu Asp Leu	Glu Lys Leu	Gln
	100	105		110	
Met Ala Arg	Pro Asn Ile	Leu Gly Leu	Arg Asn Asn	Ile Tyr Cys	Met
	115	120		125	
Ala Gln Leu	Leu Asp Asn	Ser Asp Thr	Ala Glu Pro	Thr Lys Ala	Gly
	130	135		140	
Arg Gly Ala	Ser Gln Pro	Pro Thr Pro	Thr Pro Ala	Ser Asp Ala	Phe
145		150		155	160
Gln Arg Lys	Leu Glu Gly	Cys Arg Phe	Leu His Gly	Tyr His Arg	Phe
	165	170		175	
Met His Ser	Val Gly Arg	Val Phe Ser	Lys Trp Gly	Glu Ser Pro	Asn
	180	185		190	
Arg Ser Arg	Arg His Ser	Pro His Gln	Ala Leu Arg	Lys Gly Val	Arg
	195	200		205	
Arg Thr Arg	Pro Ser Arg	Lys Gly Lys	Arg Leu Met	Thr Arg Gly	Gln

210  
Leu Pro Arg  
225

215

220

<210> 790  
<211> 227  
<212> PRT  
<213> Homo sapiens

<400> 790

Ala Ala Ile Gly Ser Cys Ser Lys Glu Tyr Arg Val Leu Leu Gly Gln  
1 5 10 15  
Leu Gln Lys Gln Thr Asp Leu Met Gln Asp Thr Ser Arg Leu Leu Asp  
20 25 30  
Pro Tyr Ile Arg Ile Gln Gly Leu Asp Val Pro Lys Leu Arg Glu His  
35 40 45  
Cys Arg Glu Arg Pro Gly Ala Phe Pro Ser Glu Glu Thr Leu Arg Gly  
50 55 60  
Leu Gly Arg Arg Gly Phe Leu Gln Thr Leu Asn Ala Thr Leu Gly Cys  
65 70 75 80  
Val Leu His Arg Leu Ala Asp Leu Glu Gln Arg Leu Pro Lys Ala Gln  
85 90 95  
Asp Leu Glu Arg Ser Gly Ile Asn Ile Glu Asp Leu Glu Lys Leu Gln  
100 105 110  
Met Ala Arg Pro Asn Ile Leu Gly Leu Arg Asn Asn Ile Tyr Cys Met  
115 120 125  
Ala Gln Leu Leu Asp Asn Ser Asp Thr Ala Glu Pro Thr Lys Ala Gly  
130 135 140  
Arg Gly Ala Ser Gln Pro Pro Thr Pro Thr Pro Ala Ser Asp Ala Phe  
145 150 155 160  
Gln Arg Lys Leu Glu Gly Cys Arg Phe Leu His Gly Tyr His Arg Phe  
165 170 175  
Met His Ser Val Gly Arg Val Phe Ser Lys Trp Gly Glu Ser Pro Asn  
180 185 190  
Arg Ser Arg Arg His Ser Pro His Gln Ala Leu Arg Lys Gly Val Arg  
195 200 205  
Arg Thr Arg Pro Ser Arg Lys Gly Lys Arg Leu Met Thr Arg Gly Gln  
210 215 220  
Leu Pro Arg  
225

<210> 791  
<211> 227  
<212> PRT  
<213> Homo sapiens

<400> 791

Ala Ala Ile Gly Ser Cys Ser Lys Glu Tyr Arg Val Leu Leu Gly Gln  
1 5 10 15  
Leu Gln Lys Gln Thr Asp Leu Met Gln Asp Thr Ser Arg Leu Leu Asp  
20 25 30  
Pro Tyr Ile Arg Ile Gln Gly Leu Asp Val Pro Lys Leu Arg Glu His  
35 40 45  
Cys Arg Glu Arg Pro Gly Ala Phe Pro Ser Glu Glu Thr Leu Arg Gly  
50 55 60  
Leu Gly Arg Arg Gly Phe Leu Gln Thr Leu Asn Ala Thr Leu Gly Cys  
65 70 75 80  
Val Leu His Arg Leu Ala Asp Leu Glu Gln Arg Leu Pro Lys Ala Gln  
85 90 95  
Asp Leu Glu Arg Ser Gly Leu Asn Ile Gln Asp Leu Glu Lys Leu Gln  
100 105 110  
Met Ala Arg Pro Asn Ile Leu Gly Leu Arg Asn Asn Ile Tyr Cys Met  
115 120 125



Ala Gln Leu Leu Asp Ser Asp Thr Ala Glu Pro Thr Lys Gly  
 130 135 140  
 Arg Gly Ala Ser Gln Pro Pro Thr Pro Thr Pro Ala Ser Asp Ala Phe  
 145 150 155 160  
 Gln Arg Lys Leu Glu Gly Cys Arg Phe Leu His Gly Tyr His Arg Phe  
 165 170 175  
 Met His Ser Val Gly Arg Val Phe Ser Lys Trp Gly Glu Ser Pro Asn  
 180 185 190  
 Arg Ser Arg Arg His Ser Pro His Gln Ala Leu Arg Lys Gly Val Arg  
 195 200 205  
 Arg Thr Arg Pro Ser Arg Lys Gly Lys Arg Leu Met Thr Arg Gly Gln  
 210 215 220  
 Leu Pro Arg  
 225

<210> 792  
 <211> 227  
 <212> PRT  
 <213> Homo sapiens

<400> 792  
 Ala Ala Ile Gly Ser Cys Ser Lys Glu Tyr Arg Val Leu Leu Gly Gln  
 1 5 10 15  
 Leu Gln Lys Gln Thr Asp Leu Met Gln Asp Thr Ser Arg Leu Leu Asp  
 20 25 30  
 Pro Tyr Ile Arg Ile Gln Gly Leu Asp Val Pro Lys Leu Arg Glu His  
 35 40 45  
 Cys Arg Glu Arg Pro Gly Ala Phe Pro Ser Glu Glu Thr Leu Arg Gly  
 50 55 60  
 Leu Gly Arg Arg Gly Phe Leu Gln Thr Leu Asn Ala Thr Leu Gly Cys  
 65 70 75 80  
 Val Leu His Arg Leu Ala Asp Leu Glu Gln Arg Leu Pro Lys Ala Gln  
 85 90 95  
 Asp Leu Glu Arg Ser Gly Leu Asn Ile Asn Asp Leu Glu Lys Leu Gln  
 100 105 110  
 Met Ala Arg Pro Asn Ile Leu Gly Leu Arg Asn Asn Ile Tyr Cys Met  
 115 120 125  
 Ala Gln Leu Leu Asp Asn Ser Asp Thr Ala Glu Pro Thr Lys Ala Gly  
 130 135 140  
 Arg Gly Ala Ser Gln Pro Pro Thr Pro Thr Pro Ala Ser Asp Ala Phe  
 145 150 155 160  
 Gln Arg Lys Leu Glu Gly Cys Arg Phe Leu His Gly Tyr His Arg Phe  
 165 170 175  
 Met His Ser Val Gly Arg Val Phe Ser Lys Trp Gly Glu Ser Pro Asn  
 180 185 190  
 Arg Ser Arg Arg His Ser Pro His Gln Ala Leu Arg Lys Gly Val Arg  
 195 200 205  
 Arg Thr Arg Pro Ser Arg Lys Gly Lys Arg Leu Met Thr Arg Gly Gln  
 210 215 220  
 Leu Pro Arg  
 225

<210> 793  
 <211> 227  
 <212> PRT  
 <213> Homo sapiens

<400> 793  
 Ala Ala Ile Gly Ser Cys Ser Lys Glu Tyr Arg Val Leu Leu Gly Gln  
 1 5 10 15  
 Leu Gln Lys Gln Thr Asp Leu Met Gln Asp Thr Ser Arg Leu Leu Asp  
 20 25 30  
 Pro Tyr Ile Arg Ile Gln Gly Leu Asp Val Pro Lys Leu Arg Glu His



<400> 795

Arg	Asn	Leu	Pro	Val	Ala	Thr	Pro	Asp	Pro	Gly	Met	Phe	Pro	Cys	Leu
1				5					10					15	
His	His	Ser	Gln	Asn	Leu	Leu	Arg	Ala	Val	Ser	Asn	Met	Leu	Gln	Lys
		20					25						30		
Ala	Arg	Gln	Thr	Leu	Glu	Phe	Tyr	Pro	Cys	Thr	Ser	Glu	Glu	Ile	Asp
	35					40					45				
His	Glu	Asp	Ile	Thr	Lys	Asp	Asn	Thr	Ser	Thr	Val	Glu	Ala	Cys	Leu
	50				55						60				
Pro	Leu	Glu	Leu	Thr	Lys	Asn	Glu	Ser	Cys	Leu	Asn	Ser	Arg	Glu	Thr
65				70						75				80	
Ser	Phe	Ile	Thr	Asn	Gly	Ser	Cys	Leu	Ala	Ser	Arg	Lys	Thr	Ser	Phe
			85						90					95	
Met	Met	Ala	Leu	Cys	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Lys	Met	Tyr
		100						105					110		
Gln	Val	Glu	Phe	Lys	Thr	Met	Asn	Ala	Lys	Leu	Leu	Met	Asp	Pro	Lys
	115					120						125			
Arg	Gln	Ile	Phe	Leu	Asp	Gln	Asn	Met	Leu	Ala	Val	Ile	Asp	Glu	Leu
	130				135						140				
Met	Gln	Ala	Leu	Asn	Phe	Asn	Ser	Glu	Thr	Val	Pro	Gln	Lys	Ser	Ser
145				150						155				160	
Leu	Glu	Glu	Pro	Asp	Phe	Tyr	Lys	Thr	Lys	Ile	Lys	Leu	Cys	Ile	Leu
			165						170					175	
Leu	His	Ala	Phe	Arg	Ile	Arg	Ala	Val	Thr	Ile	Asp	Arg	Val	Met	Ser
		180						185					190		
Tyr	Leu	Asn	Ala	Ser											
		195													

<210> 796

<211> 197

<212> PRT

<213> Homo sapiens

<400> 796

Arg	Asn	Leu	Pro	Val	Ala	Thr	Pro	Asp	Pro	Gly	Met	Phe	Pro	Cys	Leu
1				5					10					15	
His	His	Ser	Gln	Asn	Leu	Leu	Arg	Ala	Val	Ser	Asn	Met	Leu	Gln	Lys
		20					25						30		
Ala	Arg	Gln	Thr	Leu	Glu	Phe	Tyr	Pro	Cys	Thr	Ser	Glu	Glu	Ile	Asp
	35					40					45				
His	Glu	Asp	Ile	Thr	Lys	Asp	Lys	Thr	Ser	Thr	Val	Gln	Ala	Cys	Leu
	50				55						60				
Pro	Leu	Glu	Leu	Thr	Lys	Asn	Glu	Ser	Cys	Leu	Asn	Ser	Arg	Glu	Thr
65				70						75				80	
Ser	Phe	Ile	Thr	Asn	Gly	Ser	Cys	Leu	Ala	Ser	Arg	Lys	Thr	Ser	Phe
			85						90					95	
Met	Met	Ala	Leu	Cys	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Lys	Met	Tyr
		100						105					110		
Gln	Val	Glu	Phe	Lys	Thr	Met	Asn	Ala	Lys	Leu	Leu	Met	Asp	Pro	Lys
	115					120						125			
Arg	Gln	Ile	Phe	Leu	Asp	Gln	Asn	Met	Leu	Ala	Val	Ile	Asp	Glu	Leu
	130				135						140				
Met	Gln	Ala	Leu	Asn	Phe	Asn	Ser	Glu	Thr	Val	Pro	Gln	Lys	Ser	Ser
145				150						155				160	
Leu	Glu	Glu	Pro	Asp	Phe	Tyr	Lys	Thr	Lys	Ile	Lys	Leu	Cys	Ile	Leu
			165						170					175	
Leu	His	Ala	Phe	Arg	Ile	Arg	Ala	Val	Thr	Ile	Asp	Arg	Val	Met	Ser
		180						185					190		
Tyr	Leu	Asn	Ala	Ser											
		195													

<210> 797

<211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 797

Arg	Asn	Leu	Pro	Val	Ala	Thr	Pro	Asp	Pro	Gly	Met	Phe	Pro	Cys	Leu
1				5					10					15	
His	His	Ser	Gln	Asn	Leu	Leu	Arg	Ala	Val	Ser	Asn	Met	Leu	Gln	Lys
			20					25					30		
Ala	Arg	Gln	Thr	Leu	Glu	Phe	Tyr	Pro	Cys	Thr	Ser	Glu	Glu	Ile	Asp
		35					40					45			
His	Glu	Asp	Ile	Thr	Lys	Asp	Lys	Thr	Ser	Thr	Val	Asn	Ala	Cys	Leu
		50				55					60				
Pro	Leu	Glu	Leu	Thr	Lys	Asn	Glu	Ser	Cys	Leu	Asn	Ser	Arg	Glu	Thr
65					70					75					80
Ser	Phe	Ile	Thr	Asn	Gly	Ser	Cys	Leu	Ala	Ser	Arg	Lys	Thr	Ser	Phe
				85					90					95	
Met	Met	Ala	Leu	Cys	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Lys	Met	Tyr
			100					105					110		
Gln	Val	Glu	Phe	Lys	Thr	Met	Asn	Ala	Lys	Leu	Leu	Met	Asp	Pro	Lys
		115					120					125			
Arg	Gln	Ile	Phe	Leu	Asp	Gln	Asn	Met	Leu	Ala	Val	Ile	Asp	Glu	Leu
		130				135					140				
Met	Gln	Ala	Leu	Asn	Phe	Asn	Ser	Glu	Thr	Val	Pro	Gln	Lys	Ser	Ser
145					150					155					160
Leu	Glu	Glu	Pro	Asp	Phe	Tyr	Lys	Thr	Lys	Ile	Lys	Leu	Cys	Ile	Leu
				165					170					175	
Leu	His	Ala	Phe	Arg	Ile	Arg	Ala	Val	Thr	Ile	Asp	Arg	Val	Met	Ser
			180					185					190		
Tyr	Leu	Asn	Ala	Ser											
				195											

<210> 798  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 798

Arg	Asn	Leu	Pro	Val	Ala	Thr	Pro	Asp	Pro	Gly	Met	Phe	Pro	Cys	Leu
1				5					10					15	
His	His	Ser	Gln	Asn	Leu	Leu	Arg	Ala	Val	Ser	Asn	Met	Leu	Gln	Lys
			20					25					30		
Ala	Arg	Gln	Thr	Leu	Glu	Phe	Tyr	Pro	Cys	Thr	Ser	Glu	Glu	Ile	Asp
		35					40					45			
His	Glu	Asp	Ile	Thr	Lys	Asp	Lys	Thr	Ser	Thr	Val	His	Ala	Cys	Leu
		50				55					60				
Pro	Leu	Glu	Leu	Thr	Lys	Asn	Glu	Ser	Cys	Leu	Asn	Ser	Arg	Glu	Thr
65					70					75					80
Ser	Phe	Ile	Thr	Asn	Gly	Ser	Cys	Leu	Ala	Ser	Arg	Lys	Thr	Ser	Phe
				85					90					95	
Met	Met	Ala	Leu	Cys	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Lys	Met	Tyr
			100					105					110		
Gln	Val	Glu	Phe	Lys	Thr	Met	Asn	Ala	Lys	Leu	Leu	Met	Asp	Pro	Lys
		115					120					125			
Arg	Gln	Ile	Phe	Leu	Asp	Gln	Asn	Met	Leu	Ala	Val	Ile	Asp	Glu	Leu
		130				135					140				
Met	Gln	Ala	Leu	Asn	Phe	Asn	Ser	Glu	Thr	Val	Pro	Gln	Lys	Ser	Ser
145					150					155					160
Leu	Glu	Glu	Pro	Asp	Phe	Tyr	Lys	Thr	Lys	Ile	Lys	Leu	Cys	Ile	Leu
				165					170					175	
Leu	His	Ala	Phe	Arg	Ile	Arg	Ala	Val	Thr	Ile	Asp	Arg	Val	Met	Ser
			180					185					190		
Tyr	Leu	Asn	Ala	Ser											

<210> 799  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 799

Arg	Asn	Leu	Pro	Val	Ala	Thr	Pro	Asp	Pro	Gly	Met	Phe	Pro	Cys	Leu
1				5					10					15	
His	His	Ser	Gln	Asn	Leu	Leu	Arg	Ala	Val	Ser	Asn	Met	Leu	Gln	Lys
			20					25					30		
Ala	Arg	Gln	Thr	Leu	Glu	Phe	Tyr	Pro	Cys	Thr	Ser	Glu	Glu	Ile	Asp
		35					40					45			
His	Glu	Asp	Ile	Thr	Lys	Asp	Lys	Thr	Ser	Thr	Val	Glu	Ala	Cys	Leu
	50					55					60				
Pro	Val	Glu	Leu	Thr	Lys	Asn	Glu	Ser	Cys	Leu	Asn	Ser	Arg	Glu	Thr
65					70					75				80	
Ser	Phe	Ile	Thr	Asn	Gly	Ser	Cys	Leu	Ala	Ser	Arg	Lys	Thr	Ser	Phe
				85					90					95	
Met	Met	Ala	Leu	Cys	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Lys	Met	Tyr
			100					105					110		
Gln	Val	Glu	Phe	Lys	Thr	Met	Asn	Ala	Lys	Leu	Leu	Met	Asp	Pro	Lys
		115					120					125			
Arg	Gln	Ile	Phe	Leu	Asp	Gln	Asn	Met	Leu	Ala	Val	Ile	Asp	Glu	Leu
	130					135					140				
Met	Gln	Ala	Leu	Asn	Phe	Asn	Ser	Glu	Thr	Val	Pro	Gln	Lys	Ser	Ser
145					150					155				160	
Leu	Glu	Glu	Pro	Asp	Phe	Tyr	Lys	Thr	Lys	Ile	Lys	Leu	Cys	Ile	Leu
				165					170					175	
Leu	His	Ala	Phe	Arg	Ile	Arg	Ala	Val	Thr	Ile	Asp	Arg	Val	Met	Ser
			180					185					190		
Tyr	Leu	Asn	Ala	Ser											
			195												

<210> 800  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 800

Arg	Asn	Leu	Pro	Val	Ala	Thr	Pro	Asp	Pro	Gly	Met	Phe	Pro	Cys	Leu
1				5					10					15	
His	His	Ser	Gln	Asn	Leu	Leu	Arg	Ala	Val	Ser	Asn	Met	Leu	Gln	Lys
			20					25					30		
Ala	Arg	Gln	Thr	Leu	Glu	Phe	Tyr	Pro	Cys	Thr	Ser	Glu	Glu	Ile	Asp
		35					40					45			
His	Glu	Asp	Ile	Thr	Lys	Asp	Lys	Thr	Ser	Thr	Val	Glu	Ala	Cys	Leu
	50					55					60				
Pro	Ile	Glu	Leu	Thr	Lys	Asn	Glu	Ser	Cys	Leu	Asn	Ser	Arg	Glu	Thr
65					70					75				80	
Ser	Phe	Ile	Thr	Asn	Gly	Ser	Cys	Leu	Ala	Ser	Arg	Lys	Thr	Ser	Phe
				85					90					95	
Met	Met	Ala	Leu	Cys	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Lys	Met	Tyr
			100					105					110		
Gln	Val	Glu	Phe	Lys	Thr	Met	Asn	Ala	Lys	Leu	Leu	Met	Asp	Pro	Lys
		115					120					125			
Arg	Gln	Ile	Phe	Leu	Asp	Gln	Asn	Met	Leu	Ala	Val	Ile	Asp	Glu	Leu
	130					135					140				
Met	Gln	Ala	Leu	Asn	Phe	Asn	Ser	Glu	Thr	Val	Pro	Gln	Lys	Ser	Ser
145					150					155				160	
Leu	Glu	Glu	Pro	Asp	Phe	Tyr	Lys	Thr	Lys	Ile	Lys	Leu	Cys	Ile	Leu
				165					170					175	

Leu His Ala Phe Arg Arg Ala Val Thr Ile Asp Arg Val Ser  
 180 185 190  
 Tyr Leu Asn Ala Ser  
 195

<210> 801  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 801  
 Arg Asn Leu Pro Val Ala Thr Pro Asp Pro Gly Met Phe Pro Cys Leu  
 1 5 10 15  
 His His Ser Gln Asn Leu Leu Arg Ala Val Ser Asn Met Leu Gln Lys  
 20 25 30  
 Ala Arg Gln Thr Leu Glu Phe Tyr Pro Cys Thr Ser Glu Glu Ile Asp  
 35 40 45  
 His Glu Asp Ile Thr Lys Asp Lys Thr Ser Thr Val Glu Ala Cys Leu  
 50 55 60  
 Pro Leu Gln Leu Thr Lys Asn Glu Ser Cys Leu Asn Ser Arg Glu Thr  
 65 70 75 80  
 Ser Phe Ile Thr Asn Gly Ser Cys Leu Ala Ser Arg Lys Thr Ser Phe  
 85 90 95  
 Met Met Ala Leu Cys Leu Ser Ser Ile Tyr Glu Asp Leu Lys Met Tyr  
 100 105 110  
 Gln Val Glu Phe Lys Thr Met Asn Ala Lys Leu Leu Met Asp Pro Lys  
 115 120 125  
 Arg Gln Ile Phe Leu Asp Gln Asn Met Leu Ala Val Ile Asp Glu Leu  
 130 135 140  
 Met Gln Ala Leu Asn Phe Asn Ser Glu Thr Val Pro Gln Lys Ser Ser  
 145 150 155 160  
 Leu Glu Glu Pro Asp Phe Tyr Lys Thr Lys Ile Lys Leu Cys Ile Leu  
 165 170 175  
 Leu His Ala Phe Arg Ile Arg Ala Val Thr Ile Asp Arg Val Met Ser  
 180 185 190  
 Tyr Leu Asn Ala Ser  
 195

<210> 802  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 802  
 Arg Asn Leu Pro Val Ala Thr Pro Asp Pro Gly Met Phe Pro Cys Leu  
 1 5 10 15  
 His His Ser Gln Asn Leu Leu Arg Ala Val Ser Asn Met Leu Gln Lys  
 20 25 30  
 Ala Arg Gln Thr Leu Glu Phe Tyr Pro Cys Thr Ser Glu Glu Ile Asp  
 35 40 45  
 His Glu Asp Ile Thr Lys Asp Lys Thr Ser Thr Val Glu Ala Cys Leu  
 50 55 60  
 Pro Leu Asn Leu Thr Lys Asn Glu Ser Cys Leu Asn Ser Arg Glu Thr  
 65 70 75 80  
 Ser Phe Ile Thr Asn Gly Ser Cys Leu Ala Ser Arg Lys Thr Ser Phe  
 85 90 95  
 Met Met Ala Leu Cys Leu Ser Ser Ile Tyr Glu Asp Leu Lys Met Tyr  
 100 105 110  
 Gln Val Glu Phe Lys Thr Met Asn Ala Lys Leu Leu Met Asp Pro Lys  
 115 120 125  
 Arg Gln Ile Phe Leu Asp Gln Asn Met Leu Ala Val Ile Asp Glu Leu  
 130 135 140  
 Met Gln Ala Leu Asn Phe Asn Ser Glu Thr Val Pro Gln Lys Ser Ser

145										155					160
Leu	Glu	Glu	Pro	Asp	Phe	Tyr	Lys	Thr	Lys	Ile	Lys	Leu	Cys	Ile	Leu
				165						170					175
Leu	His	Ala	Phe	Arg	Ile	Arg	Ala	Val	Thr	Ile	Asp	Arg	Val	Met	Ser
			180					185					190		
Tyr	Leu	Asn	Ala	Ser											
			195												

<210> 803  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 803															
Arg	Asn	Leu	Pro	Val	Ala	Thr	Pro	Asp	Pro	Gly	Met	Phe	Pro	Cys	Leu
1				5					10					15	
His	His	Ser	Gln	Asn	Leu	Leu	Arg	Ala	Val	Ser	Asn	Met	Leu	Gln	Lys
			20					25					30		
Ala	Arg	Gln	Thr	Leu	Glu	Phe	Tyr	Pro	Cys	Thr	Ser	Glu	Glu	Ile	Asp
		35					40					45			
His	Glu	Asp	Ile	Thr	Lys	Asp	Lys	Thr	Ser	Thr	Val	Glu	Ala	Cys	Leu
	50				55						60				
Pro	Leu	His	Leu	Thr	Lys	Asn	Glu	Ser	Cys	Leu	Asn	Ser	Arg	Glu	Thr
65					70					75					80
Ser	Phe	Ile	Thr	Asn	Gly	Ser	Cys	Leu	Ala	Ser	Arg	Lys	Thr	Ser	Phe
				85					90					95	
Met	Met	Ala	Leu	Cys	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Lys	Met	Tyr
			100					105					110		
Gln	Val	Glu	Phe	Lys	Thr	Met	Asn	Ala	Lys	Leu	Leu	Met	Asp	Pro	Lys
		115					120					125			
Arg	Gln	Ile	Phe	Leu	Asp	Gln	Asn	Met	Leu	Ala	Val	Ile	Asp	Glu	Leu
		130				135					140				
Met	Gln	Ala	Leu	Asn	Phe	Asn	Ser	Glu	Thr	Val	Pro	Gln	Lys	Ser	Ser
145					150					155					160
Leu	Glu	Glu	Pro	Asp	Phe	Tyr	Lys	Thr	Lys	Ile	Lys	Leu	Cys	Ile	Leu
				165					170					175	
Leu	His	Ala	Phe	Arg	Ile	Arg	Ala	Val	Thr	Ile	Asp	Arg	Val	Met	Ser
			180					185					190		
Tyr	Leu	Asn	Ala	Ser											
			195												

<210> 804  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 804															
Arg	Asn	Leu	Pro	Val	Ala	Thr	Pro	Asp	Pro	Gly	Met	Phe	Pro	Cys	Leu
1				5					10					15	
His	His	Ser	Gln	Asn	Leu	Leu	Arg	Ala	Val	Ser	Asn	Met	Leu	Gln	Lys
			20					25					30		
Ala	Arg	Gln	Thr	Leu	Glu	Phe	Tyr	Pro	Cys	Thr	Ser	Glu	Glu	Ile	Asp
		35					40					45			
His	Glu	Asp	Ile	Thr	Lys	Asp	Lys	Thr	Ser	Thr	Val	Glu	Ala	Cys	Leu
	50				55						60				
Pro	Leu	Glu	Val	Thr	Lys	Asn	Glu	Ser	Cys	Leu	Asn	Ser	Arg	Glu	Thr
65					70					75					80
Ser	Phe	Ile	Thr	Asn	Gly	Ser	Cys	Leu	Ala	Ser	Arg	Lys	Thr	Ser	Phe
				85					90					95	
Met	Met	Ala	Leu	Cys	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Lys	Met	Tyr
			100					105					110		
Gln	Val	Glu	Phe	Lys	Thr	Met	Asn	Ala	Lys	Leu	Leu	Met	Asp	Pro	Lys
		115					120					125			

Arg Gln Ile Phe Leu 130 Gln Asn Met Leu Ala Val Ile Asp 140 Leu  
 Met Gln Ala Leu Asn Phe Asn Ser Glu Thr Val Pro Gln Lys Ser Ser  
 145 150 155 160  
 Leu Glu Glu Pro Asp Phe Tyr Lys Thr Lys Ile Lys Leu Cys Ile Leu  
 165 170 175  
 Leu His Ala Phe Arg Ile Arg Ala Val Thr Ile Asp Arg Val Met Ser  
 180 185 190  
 Tyr Leu Asn Ala Ser  
 195

<210> 805  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 805  
 Arg Asn Leu Pro Val Ala Thr Pro Asp Pro Gly Met Phe Pro Cys Leu  
 1 5 10 15  
 His His Ser Gln Asn Leu Leu Arg Ala Val Ser Asn Met Leu Gln Lys  
 20 25 30  
 Ala Arg Gln Thr Leu Glu Phe Tyr Pro Cys Thr Ser Glu Glu Ile Asp  
 35 40 45  
 His Glu Asp Ile Thr Lys Asp Lys Thr Ser Thr Val Glu Ala Cys Leu  
 50 55 60  
 Pro Leu Glu Ile Thr Lys Asn Glu Ser Cys Leu Asn Ser Arg Glu Thr  
 65 70 75 80  
 Ser Phe Ile Thr Asn Gly Ser Cys Leu Ala Ser Arg Lys Thr Ser Phe  
 85 90 95  
 Met Met Ala Leu Cys Leu Ser Ser Ile Tyr Glu Asp Leu Lys Met Tyr  
 100 105 110  
 Gln Val Glu Phe Lys Thr Met Asn Ala Lys Leu Leu Met Asp Pro Lys  
 115 120 125  
 Arg Gln Ile Phe Leu Asp Gln Asn Met Leu Ala Val Ile Asp Glu Leu  
 130 135 140  
 Met Gln Ala Leu Asn Phe Asn Ser Glu Thr Val Pro Gln Lys Ser Ser  
 145 150 155 160  
 Leu Glu Glu Pro Asp Phe Tyr Lys Thr Lys Ile Lys Leu Cys Ile Leu  
 165 170 175  
 Leu His Ala Phe Arg Ile Arg Ala Val Thr Ile Asp Arg Val Met Ser  
 180 185 190  
 Tyr Leu Asn Ala Ser  
 195

<210> 806  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 806  
 Arg Asn Leu Pro Val Ala Thr Pro Asp Pro Gly Met Phe Pro Cys Leu  
 1 5 10 15  
 His His Ser Gln Asn Leu Leu Arg Ala Val Ser Asn Met Leu Gln Lys  
 20 25 30  
 Ala Arg Gln Thr Leu Glu Phe Tyr Pro Cys Thr Ser Glu Glu Ile Asp  
 35 40 45  
 His Glu Asp Ile Thr Lys Asp Lys Thr Ser Thr Val Glu Ala Cys Leu  
 50 55 60  
 Pro Leu Glu Leu Thr Gln Asn Glu Ser Cys Leu Asn Ser Arg Glu Thr  
 65 70 75 80  
 Ser Phe Ile Thr Asn Gly Ser Cys Leu Ala Ser Arg Lys Thr Ser Phe  
 85 90 95  
 Met Met Ala Leu Cys Leu Ser Ser Ile Tyr Glu Asp Leu Lys Met Tyr





Ser Phe Ile Thr Asn 85 Ser Cys Leu Ala Ser Arg Lys Thr 95 Phe  
 Met Met Ala Leu Cys Leu Ser Ser Ile Tyr Glu Asp Leu Lys Met Tyr  
 100 105 110  
 Gln Val Glu Phe Lys Thr Met Asn Ala Lys Leu Leu Met Asp Pro Lys  
 115 120 125  
 Arg Gln Ile Phe Leu Asp Gln Asn Met Leu Ala Val Ile Asp Glu Leu  
 130 135 140  
 Met Gln Ala Leu Asn Phe Asn Ser Glu Thr Val Pro Gln Lys Ser Ser  
 145 150 155 160  
 Leu Glu Glu Pro Asp Phe Tyr Lys Thr Lys Ile Lys Leu Cys Ile Leu  
 165 170 175  
 Leu His Ala Phe Arg Ile Arg Ala Val Thr Ile Asp Arg Val Met Ser  
 180 185 190  
 Tyr Leu Asn Ala Ser  
 195

<210> 809  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 809  
 Arg Asn Leu Pro Val Ala Thr Pro Asp Pro Gly Met Phe Pro Cys Leu  
 1 5 10 15  
 His His Ser Gln Asn Leu Leu Arg Ala Val Ser Asn Met Leu Gln Lys  
 20 25 30  
 Ala Arg Gln Thr Leu Glu Phe Tyr Pro Cys Thr Ser Glu Glu Ile Asp  
 35 40 45  
 His Glu Asp Ile Thr Lys Asp Lys Thr Ser Thr Val Glu Ala Cys Leu  
 50 55 60  
 Pro Leu Glu Leu Thr Lys Asn Asn Ser Cys Leu Asn Ser Arg Glu Thr  
 65 70 75 80  
 Ser Phe Ile Thr Asn Gly Ser Cys Leu Ala Ser Arg Lys Thr Ser Phe  
 85 90 95  
 Met Met Ala Leu Cys Leu Ser Ser Ile Tyr Glu Asp Leu Lys Met Tyr  
 100 105 110  
 Gln Val Glu Phe Lys Thr Met Asn Ala Lys Leu Leu Met Asp Pro Lys  
 115 120 125  
 Arg Gln Ile Phe Leu Asp Gln Asn Met Leu Ala Val Ile Asp Glu Leu  
 130 135 140  
 Met Gln Ala Leu Asn Phe Asn Ser Glu Thr Val Pro Gln Lys Ser Ser  
 145 150 155 160  
 Leu Glu Glu Pro Asp Phe Tyr Lys Thr Lys Ile Lys Leu Cys Ile Leu  
 165 170 175  
 Leu His Ala Phe Arg Ile Arg Ala Val Thr Ile Asp Arg Val Met Ser  
 180 185 190  
 Tyr Leu Asn Ala Ser  
 195

<210> 810  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 810  
 Arg Asn Leu Pro Val Ala Thr Pro Asp Pro Gly Met Phe Pro Cys Leu  
 1 5 10 15  
 His His Ser Gln Asn Leu Leu Arg Ala Val Ser Asn Met Leu Gln Lys  
 20 25 30  
 Ala Arg Gln Thr Leu Glu Phe Tyr Pro Cys Thr Ser Glu Glu Ile Asp  
 35 40 45  
 His Glu Asp Ile Thr Lys Asp Lys Thr Ser Thr Val Glu Ala Cys Leu

50		55		60											
Pro	Leu	Glu	Leu	Thr	Lys	Asn	His	Ser	Cys	Leu	Asn	Ser	Arg	Glu	Thr
65					70					75					80
Ser	Phe	Ile	Thr	Asn	Gly	Ser	Cys	Leu	Ala	Ser	Arg	Lys	Thr	Ser	Phe
				85					90					95	
Met	Met	Ala	Leu	Cys	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Lys	Met	Tyr
			100					105					110		
Gln	Val	Glu	Phe	Lys	Thr	Met	Asn	Ala	Lys	Leu	Leu	Met	Asp	Pro	Lys
		115					120					125			
Arg	Gln	Ile	Phe	Leu	Asp	Gln	Asn	Met	Leu	Ala	Val	Ile	Asp	Glu	Leu
	130					135					140				
Met	Gln	Ala	Leu	Asn	Phe	Asn	Ser	Glu	Thr	Val	Pro	Gln	Lys	Ser	Ser
145				150					155					160	
Leu	Glu	Glu	Pro	Asp	Phe	Tyr	Lys	Thr	Lys	Ile	Lys	Leu	Cys	Ile	Leu
			165						170					175	
Leu	His	Ala	Phe	Arg	Ile	Arg	Ala	Val	Thr	Ile	Asp	Arg	Val	Met	Ser
		180					185					190			
Tyr	Leu	Asn	Ala	Ser											
	195														

<210> 811  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 811
Arg Asn Leu Pro Val Ala Thr Pro Asp Pro Gly Met Phe Pro Cys Leu
1 5 10 15
His His Ser Gln Asn Leu Leu Arg Ala Val Ser Asn Met Leu Gln Lys
20 25 30
Ala Arg Gln Thr Leu Glu Phe Tyr Pro Cys Thr Ser Glu Ile Asp
35 40 45
His Glu Asp Ile Thr Lys Asp Lys Thr Ser Thr Val Glu Ala Cys Leu
50 55 60
Pro Leu Glu Leu Thr Lys Asn Glu Ser Cys Val Asn Ser Arg Glu Thr
65 70 75 80
Ser Phe Ile Thr Asn Gly Ser Cys Leu Ala Ser Arg Lys Thr Ser Phe
85 90 95
Met Met Ala Leu Cys Leu Ser Ser Ile Tyr Glu Asp Leu Lys Met Tyr
100 105 110
Gln Val Glu Phe Lys Thr Met Asn Ala Lys Leu Leu Met Asp Pro Lys
115 120 125
Arg Gln Ile Phe Leu Asp Gln Asn Met Leu Ala Val Ile Asp Glu Leu
130 135 140
Met Gln Ala Leu Asn Phe Asn Ser Glu Thr Val Pro Gln Lys Ser Ser
145 150 155 160
Leu Glu Glu Pro Asp Phe Tyr Lys Thr Lys Ile Lys Leu Cys Ile Leu
165 170 175
Leu His Ala Phe Arg Ile Arg Ala Val Thr Ile Asp Arg Val Met Ser
180 185 190
Tyr Leu Asn Ala Ser
195

<210> 812  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 812
Arg Asn Leu Pro Val Ala Thr Pro Asp Pro Gly Met Phe Pro Cys Leu
1 5 10 15
His His Ser Gln Asn Leu Leu Arg Ala Val Ser Asn Met Leu Gln Lys
20 25 30

Ala Arg Gln Thr Leu Phe Tyr Pro Cys Thr Ser Glu Glu Asp  
 35 40 45  
 His Glu Asp Ile Thr Lys Asp Lys Thr Ser Thr Val Glu Ala Cys Leu  
 50 55 60  
 Pro Leu Glu Leu Thr Lys Asn Glu Ser Cys Ile Asn Ser Arg Glu Thr  
 65 70 75 80  
 Ser Phe Ile Thr Asn Gly Ser Cys Leu Ala Ser Arg Lys Thr Ser Phe  
 85 90 95  
 Met Met Ala Leu Cys Leu Ser Ser Ile Tyr Glu Asp Leu Lys Met Tyr  
 100 105 110  
 Gln Val Glu Phe Lys Thr Met Asn Ala Lys Leu Leu Met Asp Pro Lys  
 115 120 125  
 Arg Gln Ile Phe Leu Asp Gln Asn Met Leu Ala Val Ile Asp Glu Leu  
 130 135 140  
 Met Gln Ala Leu Asn Phe Asn Ser Glu Thr Val Pro Gln Lys Ser Ser  
 145 150 155 160  
 Leu Glu Glu Pro Asp Phe Tyr Lys Thr Lys Ile Lys Leu Cys Ile Leu  
 165 170 175  
 Leu His Ala Phe Arg Ile Arg Ala Val Thr Ile Asp Arg Val Met Ser  
 180 185 190  
 Tyr Leu Asn Ala Ser  
 195

<210> 813  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 813  
 Arg Asn Leu Pro Val Ala Thr Pro Asp Pro Gly Met Phe Pro Cys Leu  
 1 5 10 15  
 His His Ser Gln Asn Leu Leu Arg Ala Val Ser Asn Met Leu Gln Lys  
 20 25 30  
 Ala Arg Gln Thr Leu Glu Phe Tyr Pro Cys Thr Ser Glu Glu Ile Asp  
 35 40 45  
 His Glu Asp Ile Thr Lys Asp Lys Thr Ser Thr Val Glu Ala Cys Leu  
 50 55 60  
 Pro Leu Glu Leu Thr Lys Asn Glu Ser Cys Leu Asn Ser His Glu Thr  
 65 70 75 80  
 Ser Phe Ile Thr Asn Gly Ser Cys Leu Ala Ser Arg Lys Thr Ser Phe  
 85 90 95  
 Met Met Ala Leu Cys Leu Ser Ser Ile Tyr Glu Asp Leu Lys Met Tyr  
 100 105 110  
 Gln Val Glu Phe Lys Thr Met Asn Ala Lys Leu Leu Met Asp Pro Lys  
 115 120 125  
 Arg Gln Ile Phe Leu Asp Gln Asn Met Leu Ala Val Ile Asp Glu Leu  
 130 135 140  
 Met Gln Ala Leu Asn Phe Asn Ser Glu Thr Val Pro Gln Lys Ser Ser  
 145 150 155 160  
 Leu Glu Glu Pro Asp Phe Tyr Lys Thr Lys Ile Lys Leu Cys Ile Leu  
 165 170 175  
 Leu His Ala Phe Arg Ile Arg Ala Val Thr Ile Asp Arg Val Met Ser  
 180 185 190  
 Tyr Leu Asn Ala Ser  
 195

<210> 814  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 814  
 Arg Asn Leu Pro Val Ala Thr Pro Asp Pro Gly Met Phe Pro Cys Leu

1	5	10																	
His	His	Ser	Gln	Asn	Leu	Leu	Arg	Ala	Val	Ser	Asn	Met	Leu	Gln	Lys				
	20							25					30						
Ala	Arg	Gln	Thr	Leu	Glu	Phe	Tyr	Pro	Cys	Thr	Ser	Glu	Glu	Ile	Asp				
	35						40					45							
His	Glu	Asp	Ile	Thr	Lys	Asp	Lys	Thr	Ser	Thr	Val	Glu	Ala	Cys	Leu				
	50					55					60								
Pro	Leu	Glu	Leu	Thr	Lys	Asn	Glu	Ser	Cys	Leu	Asn	Ser	Gln	Glu	Thr				
65					70					75					80				
Ser	Phe	Ile	Thr	Asn	Gly	Ser	Cys	Leu	Ala	Ser	Arg	Lys	Thr	Ser	Phe				
			85					90					95						
Met	Met	Ala	Leu	Cys	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Lys	Met	Tyr				
		100						105					110						
Gln	Val	Glu	Phe	Lys	Thr	Met	Asn	Ala	Lys	Leu	Leu	Met	Asp	Pro	Lys				
	115						120					125							
Arg	Gln	Ile	Phe	Leu	Asp	Gln	Asn	Met	Leu	Ala	Val	Ile	Asp	Glu	Leu				
	130					135					140								
Met	Gln	Ala	Leu	Asn	Phe	Asn	Ser	Glu	Thr	Val	Pro	Gln	Lys	Ser	Ser				
145					150					155					160				
Leu	Glu	Glu	Pro	Asp	Phe	Tyr	Lys	Thr	Lys	Ile	Lys	Leu	Cys	Ile	Leu				
			165						170					175					
Leu	His	Ala	Phe	Arg	Ile	Arg	Ala	Val	Thr	Ile	Asp	Arg	Val	Met	Ser				
		180					185						190						
Tyr	Leu	Asn	Ala	Ser															
		195																	

<210> 815  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 815																			
Arg	Asn	Leu	Pro	Val	Ala	Thr	Pro	Asp	Pro	Gly	Met	Phe	Pro	Cys	Leu				
1			5						10				15						
His	His	Ser	Gln	Asn	Leu	Leu	Arg	Ala	Val	Ser	Asn	Met	Leu	Gln	Lys				
		20						25					30						
Ala	Arg	Gln	Thr	Leu	Glu	Phe	Tyr	Pro	Cys	Thr	Ser	Glu	Glu	Ile	Asp				
	35						40					45							
His	Glu	Asp	Ile	Thr	Lys	Asp	Lys	Thr	Ser	Thr	Val	Glu	Ala	Cys	Leu				
	50					55					60								
Pro	Leu	Glu	Leu	Thr	Lys	Asn	Glu	Ser	Cys	Leu	Asn	Ser	Arg	Gln	Thr				
65					70					75					80				
Ser	Phe	Ile	Thr	Asn	Gly	Ser	Cys	Leu	Ala	Ser	Arg	Lys	Thr	Ser	Phe				
			85					90					95						
Met	Met	Ala	Leu	Cys	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Lys	Met	Tyr				
		100						105					110						
Gln	Val	Glu	Phe	Lys	Thr	Met	Asn	Ala	Lys	Leu	Leu	Met	Asp	Pro	Lys				
	115						120					125							
Arg	Gln	Ile	Phe	Leu	Asp	Gln	Asn	Met	Leu	Ala	Val	Ile	Asp	Glu	Leu				
	130					135					140								
Met	Gln	Ala	Leu	Asn	Phe	Asn	Ser	Glu	Thr	Val	Pro	Gln	Lys	Ser	Ser				
145					150					155					160				
Leu	Glu	Glu	Pro	Asp	Phe	Tyr	Lys	Thr	Lys	Ile	Lys	Leu	Cys	Ile	Leu				
			165						170					175					
Leu	His	Ala	Phe	Arg	Ile	Arg	Ala	Val	Thr	Ile	Asp	Arg	Val	Met	Ser				
		180					185						190						
Tyr	Leu	Asn	Ala	Ser															
		195																	

<210> 816  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 816

Arg	Asn	Leu	Pro	Val	Ala	Thr	Pro	Asp	Pro	Gly	Met	Phe	Pro	Cys	Leu
1				5					10					15	
His	His	Ser	Gln	Asn	Leu	Leu	Arg	Ala	Val	Ser	Asn	Met	Leu	Gln	Lys
			20					25					30		
Ala	Arg	Gln	Thr	Leu	Glu	Phe	Tyr	Pro	Cys	Thr	Ser	Glu	Glu	Ile	Asp
		35					40					45			
His	Glu	Asp	Ile	Thr	Lys	Asp	Lys	Thr	Ser	Thr	Val	Glu	Ala	Cys	Leu
	50					55					60				
Pro	Leu	Glu	Leu	Thr	Lys	Asn	Glu	Ser	Cys	Leu	Asn	Ser	Arg	Asn	Thr
65					70					75					80
Ser	Phe	Ile	Thr	Asn	Gly	Ser	Cys	Leu	Ala	Ser	Arg	Lys	Thr	Ser	Phe
				85					90					95	
Met	Met	Ala	Leu	Cys	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Lys	Met	Tyr
			100					105					110		
Gln	Val	Glu	Phe	Lys	Thr	Met	Asn	Ala	Lys	Leu	Leu	Met	Asp	Pro	Lys
			115					120					125		
Arg	Gln	Ile	Phe	Leu	Asp	Gln	Asn	Met	Leu	Ala	Val	Ile	Asp	Glu	Leu
						130			135			140			
Met	Gln	Ala	Leu	Asn	Phe	Asn	Ser	Glu	Thr	Val	Pro	Gln	Lys	Ser	Ser
145					150					155					160
Leu	Glu	Glu	Pro	Asp	Phe	Tyr	Lys	Thr	Lys	Ile	Lys	Leu	Cys	Ile	Leu
				165					170					175	
Leu	His	Ala	Phe	Arg	Ile	Arg	Ala	Val	Thr	Ile	Asp	Arg	Val	Met	Ser
			180					185					190		
Tyr	Leu	Asn	Ala	Ser											
				195											

<210> 817

<211> 197

<212> PRT

<213> Homo sapiens

<400> 817

Arg	Asn	Leu	Pro	Val	Ala	Thr	Pro	Asp	Pro	Gly	Met	Phe	Pro	Cys	Leu
1				5					10					15	
His	His	Ser	Gln	Asn	Leu	Leu	Arg	Ala	Val	Ser	Asn	Met	Leu	Gln	Lys
			20					25					30		
Ala	Arg	Gln	Thr	Leu	Glu	Phe	Tyr	Pro	Cys	Thr	Ser	Glu	Glu	Ile	Asp
		35					40					45			
His	Glu	Asp	Ile	Thr	Lys	Asp	Lys	Thr	Ser	Thr	Val	Glu	Ala	Cys	Leu
	50					55					60				
Pro	Leu	Glu	Leu	Thr	Lys	Asn	Glu	Ser	Cys	Leu	Asn	Ser	Arg	His	Thr
65					70					75					80
Ser	Phe	Ile	Thr	Asn	Gly	Ser	Cys	Leu	Ala	Ser	Arg	Lys	Thr	Ser	Phe
				85					90					95	
Met	Met	Ala	Leu	Cys	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Lys	Met	Tyr
			100					105					110		
Gln	Val	Glu	Phe	Lys	Thr	Met	Asn	Ala	Lys	Leu	Leu	Met	Asp	Pro	Lys
			115					120					125		
Arg	Gln	Ile	Phe	Leu	Asp	Gln	Asn	Met	Leu	Ala	Val	Ile	Asp	Glu	Leu
						130			135			140			
Met	Gln	Ala	Leu	Asn	Phe	Asn	Ser	Glu	Thr	Val	Pro	Gln	Lys	Ser	Ser
145					150					155					160
Leu	Glu	Glu	Pro	Asp	Phe	Tyr	Lys	Thr	Lys	Ile	Lys	Leu	Cys	Ile	Leu
				165					170					175	
Leu	His	Ala	Phe	Arg	Ile	Arg	Ala	Val	Thr	Ile	Asp	Arg	Val	Met	Ser
			180					185					190		
Tyr	Leu	Asn	Ala	Ser											
				195											

<210> 818

<211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 818

Arg	Asn	Leu	Pro	Val	Ala	Thr	Pro	Asp	Pro	Gly	Met	Phe	Pro	Cys	Leu
1				5					10					15	
His	His	Ser	Gln	Asn	Leu	Leu	Arg	Ala	Val	Ser	Asn	Met	Leu	Gln	Lys
			20					25					30		
Ala	Arg	Gln	Thr	Leu	Glu	Phe	Tyr	Pro	Cys	Thr	Ser	Glu	Glu	Ile	Asp
			35					40					45		
His	Glu	Asp	Ile	Thr	Lys	Asp	Lys	Thr	Ser	Thr	Val	Glu	Ala	Cys	Leu
			50				55				60				
Pro	Leu	Glu	Leu	Thr	Lys	Asn	Glu	Ser	Cys	Leu	Asn	Ser	Arg	Glu	Thr
65					70					75				80	
Ser	Ile	Ile	Thr	Asn	Gly	Ser	Cys	Leu	Ala	Ser	Arg	Lys	Thr	Ser	Phe
				85					90					95	
Met	Met	Ala	Leu	Cys	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Lys	Met	Tyr
			100					105						110	
Gln	Val	Glu	Phe	Lys	Thr	Met	Asn	Ala	Lys	Leu	Leu	Met	Asp	Pro	Lys
			115				120						125		
Arg	Gln	Ile	Phe	Leu	Asp	Gln	Asn	Met	Leu	Ala	Val	Ile	Asp	Glu	Leu
			130				135						140		
Met	Gln	Ala	Leu	Asn	Phe	Asn	Ser	Glu	Thr	Val	Pro	Gln	Lys	Ser	Ser
145					150					155				160	
Leu	Glu	Glu	Pro	Asp	Phe	Tyr	Lys	Thr	Lys	Ile	Lys	Leu	Cys	Ile	Leu
				165					170					175	
Leu	His	Ala	Phe	Arg	Ile	Arg	Ala	Val	Thr	Ile	Asp	Arg	Val	Met	Ser
			180					185						190	
Tyr	Leu	Asn	Ala	Ser											
			195												

<210> 819  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 819

Arg	Asn	Leu	Pro	Val	Ala	Thr	Pro	Asp	Pro	Gly	Met	Phe	Pro	Cys	Leu
1				5					10					15	
His	His	Ser	Gln	Asn	Leu	Leu	Arg	Ala	Val	Ser	Asn	Met	Leu	Gln	Lys
			20					25					30		
Ala	Arg	Gln	Thr	Leu	Glu	Phe	Tyr	Pro	Cys	Thr	Ser	Glu	Glu	Ile	Asp
			35					40					45		
His	Glu	Asp	Ile	Thr	Lys	Asp	Lys	Thr	Ser	Thr	Val	Glu	Ala	Cys	Leu
			50				55				60				
Pro	Leu	Glu	Leu	Thr	Lys	Asn	Glu	Ser	Cys	Leu	Asn	Ser	Arg	Glu	Thr
65					70					75				80	
Ser	Val	Ile	Thr	Asn	Gly	Ser	Cys	Leu	Ala	Ser	Arg	Lys	Thr	Ser	Phe
				85					90					95	
Met	Met	Ala	Leu	Cys	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Lys	Met	Tyr
			100					105						110	
Gln	Val	Glu	Phe	Lys	Thr	Met	Asn	Ala	Lys	Leu	Leu	Met	Asp	Pro	Lys
			115				120						125		
Arg	Gln	Ile	Phe	Leu	Asp	Gln	Asn	Met	Leu	Ala	Val	Ile	Asp	Glu	Leu
			130				135						140		
Met	Gln	Ala	Leu	Asn	Phe	Asn	Ser	Glu	Thr	Val	Pro	Gln	Lys	Ser	Ser
145					150					155				160	
Leu	Glu	Glu	Pro	Asp	Phe	Tyr	Lys	Thr	Lys	Ile	Lys	Leu	Cys	Ile	Leu
				165					170					175	
Leu	His	Ala	Phe	Arg	Ile	Arg	Ala	Val	Thr	Ile	Asp	Arg	Val	Met	Ser
			180					185						190	
Tyr	Leu	Asn	Ala	Ser											

<210> 820  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 820

Arg	Asn	Leu	Pro	Val	Ala	Thr	Pro	Asp	Pro	Gly	Met	Phe	Pro	Cys	Leu
1				5					10					15	
His	His	Ser	Gln	Asn	Leu	Leu	Arg	Ala	Val	Ser	Asn	Met	Leu	Gln	Lys
			20					25					30		
Ala	Arg	Gln	Thr	Leu	Glu	Phe	Tyr	Pro	Cys	Thr	Ser	Glu	Glu	Ile	Asp
		35					40					45			
His	Glu	Asp	Ile	Thr	Lys	Asp	Lys	Thr	Ser	Thr	Val	Glu	Ala	Cys	Leu
	50					55					60				
Pro	Leu	Glu	Leu	Thr	Lys	Asn	Glu	Ser	Cys	Leu	Asn	Ser	Arg	Glu	Thr
	65				70					75				80	
Ser	Phe	Ile	Thr	Asn	Gly	Ser	Cys	Val	Ala	Ser	Arg	Lys	Thr	Ser	Phe
				85					90					95	
Met	Met	Ala	Leu	Cys	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Lys	Met	Tyr
			100					105					110		
Gln	Val	Glu	Phe	Lys	Thr	Met	Asn	Ala	Lys	Leu	Leu	Met	Asp	Pro	Lys
		115					120						125		
Arg	Gln	Ile	Phe	Leu	Asp	Gln	Asn	Met	Leu	Ala	Val	Ile	Asp	Glu	Leu
		130				135					140				
Met	Gln	Ala	Leu	Asn	Phe	Asn	Ser	Glu	Thr	Val	Pro	Gln	Lys	Ser	Ser
					150					155					160
Leu	Glu	Glu	Pro	Asp	Phe	Tyr	Lys	Thr	Lys	Ile	Lys	Leu	Cys	Ile	Leu
				165					170					175	
Leu	His	Ala	Phe	Arg	Ile	Arg	Ala	Val	Thr	Ile	Asp	Arg	Val	Met	Ser
			180					185					190		
Tyr	Leu	Asn	Ala	Ser											
				195											

<210> 821  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 821

Arg	Asn	Leu	Pro	Val	Ala	Thr	Pro	Asp	Pro	Gly	Met	Phe	Pro	Cys	Leu
1				5					10					15	
His	His	Ser	Gln	Asn	Leu	Leu	Arg	Ala	Val	Ser	Asn	Met	Leu	Gln	Lys
			20					25					30		
Ala	Arg	Gln	Thr	Leu	Glu	Phe	Tyr	Pro	Cys	Thr	Ser	Glu	Glu	Ile	Asp
		35					40					45			
His	Glu	Asp	Ile	Thr	Lys	Asp	Lys	Thr	Ser	Thr	Val	Glu	Ala	Cys	Leu
	50					55					60				
Pro	Leu	Glu	Leu	Thr	Lys	Asn	Glu	Ser	Cys	Leu	Asn	Ser	Arg	Glu	Thr
	65				70					75				80	
Ser	Phe	Ile	Thr	Asn	Gly	Ser	Cys	Ile	Ala	Ser	Arg	Lys	Thr	Ser	Phe
				85					90					95	
Met	Met	Ala	Leu	Cys	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Lys	Met	Tyr
			100					105					110		
Gln	Val	Glu	Phe	Lys	Thr	Met	Asn	Ala	Lys	Leu	Leu	Met	Asp	Pro	Lys
		115					120						125		
Arg	Gln	Ile	Phe	Leu	Asp	Gln	Asn	Met	Leu	Ala	Val	Ile	Asp	Glu	Leu
		130				135					140				
Met	Gln	Ala	Leu	Asn	Phe	Asn	Ser	Glu	Thr	Val	Pro	Gln	Lys	Ser	Ser
					150					155					160
Leu	Glu	Glu	Pro	Asp	Phe	Tyr	Lys	Thr	Lys	Ile	Lys	Leu	Cys	Ile	Leu
				165					170					175	



Leu His Ala Phe Arg 180 Arg Ala Val Thr Ile Asp Arg Val 190 Ser  
 Tyr Leu Asn Ala Ser 195

<210> 822  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 822  
 Arg Asn Leu Pro Val Ala Thr Pro Asp Pro Gly Met Phe Pro Cys Leu  
 1 5 10 15  
 His His Ser Gln Asn Leu Leu Arg Ala Val Ser Asn Met Leu Gln Lys  
 20 25 30  
 Ala Arg Gln Thr Leu Glu Phe Tyr Pro Cys Thr Ser Glu Glu Ile Asp  
 35 40 45  
 His Glu Asp Ile Thr Lys Asp Lys Thr Ser Thr Val Glu Ala Cys Leu  
 50 55 60  
 Pro Leu Glu Leu Thr Lys Asn Glu Ser Cys Leu Asn Ser Arg Glu Thr  
 65 70 75 80  
 Ser Phe Ile Thr Asn Gly Ser Cys Leu Ala Ser His Lys Thr Ser Phe  
 85 90 95  
 Met Met Ala Leu Cys Leu Ser Ser Ile Tyr Glu Asp Leu Lys Met Tyr  
 100 105 110  
 Gln Val Glu Phe Lys Thr Met Asn Ala Lys Leu Leu Met Asp Pro Lys  
 115 120 125  
 Arg Gln Ile Phe Leu Asp Gln Asn Met Leu Ala Val Ile Asp Glu Leu  
 130 135 140  
 Met Gln Ala Leu Asn Phe Asn Ser Glu Thr Val Pro Gln Lys Ser Ser  
 145 150 155 160  
 Leu Glu Glu Pro Asp Phe Tyr Lys Thr Lys Ile Lys Leu Cys Ile Leu  
 165 170 175  
 Leu His Ala Phe Arg Ile Arg Ala Val Thr Ile Asp Arg Val Met Ser  
 180 185 190  
 Tyr Leu Asn Ala Ser 195

<210> 823  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 823  
 Arg Asn Leu Pro Val Ala Thr Pro Asp Pro Gly Met Phe Pro Cys Leu  
 1 5 10 15  
 His His Ser Gln Asn Leu Leu Arg Ala Val Ser Asn Met Leu Gln Lys  
 20 25 30  
 Ala Arg Gln Thr Leu Glu Phe Tyr Pro Cys Thr Ser Glu Glu Ile Asp  
 35 40 45  
 His Glu Asp Ile Thr Lys Asp Lys Thr Ser Thr Val Glu Ala Cys Leu  
 50 55 60  
 Pro Leu Glu Leu Thr Lys Asn Glu Ser Cys Leu Asn Ser Arg Glu Thr  
 65 70 75 80  
 Ser Phe Ile Thr Asn Gly Ser Cys Leu Ala Ser Gln Lys Thr Ser Phe  
 85 90 95  
 Met Met Ala Leu Cys Leu Ser Ser Ile Tyr Glu Asp Leu Lys Met Tyr  
 100 105 110  
 Gln Val Glu Phe Lys Thr Met Asn Ala Lys Leu Leu Met Asp Pro Lys  
 115 120 125  
 Arg Gln Ile Phe Leu Asp Gln Asn Met Leu Ala Val Ile Asp Glu Leu  
 130 135 140  
 Met Gln Ala Leu Asn Phe Asn Ser Glu Thr Val Pro Gln Lys Ser Ser

[illegible]

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<210> 824
<211> 197
<212> PRT
<213> Homo sapiens
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<400> 824
Arg Asn Leu Pro Val Ala Thr Pro Asp Pro Gly Met Phe Pro Cys Leu
 1          5          10          15
His His Ser Gln Asn Leu Leu Arg Ala Val Ser Asn Met Leu Gln Lys
      20          25          30
Ala Arg Gln Thr Leu Glu Phe Tyr Pro Cys Thr Ser Glu Glu Ile Asp
      35          40          45
His Glu Asp Ile Thr Lys Asp Lys Thr Ser Thr Val Glu Ala Cys Leu
      50          55          60
Pro Leu Glu Leu Thr Lys Asn Glu Ser Cys Leu Asn Ser Arg Glu Thr
65          70          75          80
Ser Phe Ile Thr Asn Gly Ser Cys Leu Ala Ser Arg Gln Thr Ser Phe
      85          90          95
Met Met Ala Leu Cys Leu Ser Ser Ile Tyr Glu Asp Leu Lys Met Tyr
      100          105          110
Gln Val Glu Phe Lys Thr Met Asn Ala Lys Leu Leu Met Asp Pro Lys
      115          120          125
Arg Gln Ile Phe Leu Asp Gln Asn Met Leu Ala Val Ile Asp Glu Leu
      130          135          140
Met Gln Ala Leu Asn Phe Asn Ser Glu Thr Val Pro Gln Lys Ser Ser
145          150          155          160
Leu Glu Glu Pro Asp Phe Tyr Lys Thr Lys Ile Lys Leu Cys Ile Leu
      165          170          175
Leu His Ala Phe Arg Ile Arg Ala Val Thr Ile Asp Arg Val Met Ser
      180          185          190
Tyr Leu Asn Ala Ser
      195
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<210> 825
<211> 197
<212> PRT
<213> Homo sapiens
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<400> 825															
Arg	Asn	Leu	Pro	Val	Ala	Thr	Pro	Asp	Pro	Gly	Met	Phe	Pro	Cys	Leu
1				5					10					15	
His	His	Ser	Gln	Asn	Leu	Leu	Arg	Ala	Val	Ser	Asn	Met	Leu	Gln	Lys
			20					25					30		
Ala	Arg	Gln	Thr	Leu	Glu	Phe	Tyr	Pro	Cys	Thr	Ser	Glu	Glu	Ile	Asp
		35					40					45			
His	Glu	Asp	Ile	Thr	Lys	Asp	Lys	Thr	Ser	Thr	Val	Glu	Ala	Cys	Leu
	50					55					60				
Pro	Leu	Glu	Leu	Thr	Lys	Asn	Glu	Ser	Cys	Leu	Asn	Ser	Arg	Glu	Thr
65					70					75					80
Ser	Phe	Ile	Thr	Asn	Gly	Ser	Cys	Leu	Ala	Ser	Arg	Asn	Thr	Ser	Phe
				85					90					95	
Met	Met	Ala	Leu	Cys	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Lys	Met	Tyr
			100					105					110		
Gln	Val	Glu	Phe	Lys	Thr	Met	Asn	Ala	Lys	Leu	Leu	Met	Asp	Pro	Lys
		115					120					125			

Arg Gln Ile Phe Leu 130 Gln Asn Met Leu Ala Val Ile Asp 140 Leu  
 Met Gln Ala Leu Asn Phe 145 Asn Ser Glu Thr Val Pro Gln Lys Ser Ser 155 160  
 Leu Glu Glu Pro Asp Phe 165 Tyr Lys Thr Lys Ile Lys Leu Cys Ile Leu 170 175  
 Leu His Ala Phe Arg 180 Ile Arg Ala Val Thr Ile Asp Arg Val Met Ser 185 190  
 Tyr Leu Asn Ala Ser 195

<210> 826  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 826  
 Arg Asn Leu Pro Val Ala Thr Pro Asp Pro Gly Met Phe Pro Cys Leu 1 5 10 15  
 His His Ser Gln Asn Leu Leu Arg Ala Val Ser Asn Met Leu Gln Lys 20 25 30  
 Ala Arg Gln Thr Leu Glu Phe Tyr Pro Cys Thr Ser Glu Glu Ile Asp 35 40 45  
 His Glu Asp Ile Thr Lys Asp Lys Thr Ser Thr Val Glu Ala Cys Leu 50 55 60  
 Pro Leu Glu Leu Thr Lys Asn Glu Ser Cys Leu Asn Ser Arg Glu Thr 65 70 75 80  
 Ser Phe Ile Thr Asn Gly Ser Cys Leu Ala Ser Arg Lys Thr Ser Phe 85 90 95  
 Met Met Ala Leu Cys Leu Ser Ser Ile Tyr Gln Asp Leu Lys Met Tyr 100 105 110  
 Gln Val Glu Phe Lys Thr Met Asn Ala Lys Leu Leu Met Asp Pro Lys 115 120 125  
 Arg Gln Ile Phe Leu Asp Gln Asn Met Leu Ala Val Ile Asp Glu Leu 130 135 140  
 Met Gln Ala Leu Asn Phe Asn Ser Glu Thr Val Pro Gln Lys Ser Ser 145 150 155 160  
 Leu Glu Glu Pro Asp Phe Tyr Lys Thr Lys Ile Lys Leu Cys Ile Leu 165 170 175  
 Leu His Ala Phe Arg Ile Arg Ala Val Thr Ile Asp Arg Val Met Ser 180 185 190  
 Tyr Leu Asn Ala Ser 195

<210> 827  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 827  
 Arg Asn Leu Pro Val Ala Thr Pro Asp Pro Gly Met Phe Pro Cys Leu 1 5 10 15  
 His His Ser Gln Asn Leu Leu Arg Ala Val Ser Asn Met Leu Gln Lys 20 25 30  
 Ala Arg Gln Thr Leu Glu Phe Tyr Pro Cys Thr Ser Glu Glu Ile Asp 35 40 45  
 His Glu Asp Ile Thr Lys Asp Lys Thr Ser Thr Val Glu Ala Cys Leu 50 55 60  
 Pro Leu Glu Leu Thr Lys Asn Glu Ser Cys Leu Asn Ser Arg Glu Thr 65 70 75 80  
 Ser Phe Ile Thr Asn Gly Ser Cys Leu Ala Ser Arg Lys Thr Ser Phe 85 90 95  
 Met Met Ala Leu Cys Leu Ser Ser Ile Tyr Asn Asp Leu Lys Met Tyr



Ser	Phe	Ile	Thr	Asn	85	Ser	Cys	Leu	Ala	Ser	Arg	Lys	Thr	95	Phe
Met	Met	Ala	Leu	Cys	100	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Gln	Met
Gln	Val	Glu	Phe	Lys	115	Thr	Met	Asn	Ala	Lys	Leu	Leu	Met	Asp	Pro
Arg	Gln	Ile	Phe	Leu	130	Asp	Gln	Asn	Met	Leu	Ala	Val	Ile	Asp	Glu
Met	Gln	Ala	Leu	Asn	145	Phe	Asn	Ser	Glu	Thr	Val	Pro	Gln	Lys	Ser
Leu	Glu	Glu	Pro	Asp	165	Phe	Tyr	Lys	Thr	Lys	Ile	Lys	Leu	Cys	Ile
Leu	His	Ala	Phe	Arg	180	Ile	Arg	Ala	Val	Thr	Ile	Asp	Arg	Val	Met
Tyr	Leu	Asn	Ala	Ser	195										

<210> 830  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

Arg	Asn	Leu	Pro	Val	5	Ala	Thr	Pro	Asp	10	Pro	Gly	Met	Phe	Pro
His	His	Ser	Gln	Asn	20	Leu	Leu	Arg	Ala	25	Val	Ser	Asn	Met	Leu
Ala	Arg	Gln	Thr	Leu	35	Glu	Phe	Tyr	Pro	40	Cys	Thr	Ser	Glu	Glu
His	Glu	Asp	Ile	Thr	50	Lys	Asp	Lys	Thr	55	Ser	Thr	Val	Glu	Ala
Pro	Leu	Glu	Leu	Thr	65	Lys	Asn	Glu	Ser	70	Cys	Leu	Asn	Ser	Arg
Ser	Phe	Ile	Thr	Asn	85	Gly	Ser	Cys	Leu	90	Ala	Ser	Arg	Lys	Thr
Met	Met	Ala	Leu	Cys	100	Leu	Ser	Ser	Ile	105	Tyr	Glu	Asp	Leu	Asn
Gln	Val	Glu	Phe	Lys	115	Thr	Met	Asn	Ala	120	Lys	Leu	Leu	Met	Asp
Arg	Gln	Ile	Phe	Leu	130	Asp	Gln	Asn	Met	135	Leu	Ala	Val	Ile	Asp
Met	Gln	Ala	Leu	Asn	145	Phe	Asn	Ser	Glu	150	Thr	Val	Pro	Gln	Lys
Leu	Glu	Glu	Pro	Asp	165	Phe	Tyr	Lys	Thr	170	Lys	Ile	Lys	Leu	Cys
Leu	His	Ala	Phe	Arg	180	Ile	Arg	Ala	Val	185	Thr	Ile	Asp	Arg	Val
Tyr	Leu	Asn	Ala	Ser	195										

<210> 831  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

Arg	Asn	Leu	Pro	Val	5	Ala	Thr	Pro	Asp	10	Pro	Gly	Met	Phe	Pro
His	His	Ser	Gln	Asn	20	Leu	Leu	Arg	Ala	25	Val	Ser	Asn	Met	Leu
Ala	Arg	Gln	Thr	Leu	35	Glu	Phe	Tyr	Pro	40	Cys	Thr	Ser	Glu	Glu
His	Glu	Asp	Ile	Thr		Lys	Asp	Lys	Thr		Ser	Thr	Val	Glu	Ala

50	Pro	Leu	Glu	Leu	Thr	Lys	Asn	Glu	Ser	Cys	Leu	Asn	Ser	Arg	Glu	Thr
65	Ser	Phe	Ile	Thr	Asn	Gly	Ser	Cys	Leu	Ala	Ser	Arg	Lys	Thr	Ser	Phe
				85						90					95	
Met	Met	Ala	Leu	Cys	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Lys	Val	Tyr	
			100					105						110		
Gln	Val	Glu	Phe	Lys	Thr	Met	Asn	Ala	Lys	Leu	Leu	Met	Asp	Pro	Lys	
		115					120						125			
Arg	Gln	Ile	Phe	Leu	Asp	Gln	Asn	Met	Leu	Ala	Val	Ile	Asp	Glu	Leu	
	130					135					140					
Met	Gln	Ala	Leu	Asn	Phe	Asn	Ser	Glu	Thr	Val	Pro	Gln	Lys	Ser	Ser	
145				150						155					160	
Leu	Glu	Glu	Pro	Asp	Phe	Tyr	Lys	Thr	Lys	Ile	Lys	Leu	Cys	Ile	Leu	
			165						170					175		
Leu	His	Ala	Phe	Arg	Ile	Arg	Ala	Val	Thr	Ile	Asp	Arg	Val	Met	Ser	
		180						185					190			
Tyr	Leu	Asn	Ala	Ser												
		195														

<210> 832  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 832	Arg	Asn	Leu	Pro	Val	Ala	Thr	Pro	Asp	Pro	Gly	Met	Phe	Pro	Cys	Leu
1				5						10					15	
His	His	Ser	Gln	Asn	Leu	Leu	Arg	Ala	Val	Ser	Asn	Met	Leu	Gln	Lys	
		20						25					30			
Ala	Arg	Gln	Thr	Leu	Glu	Phe	Tyr	Pro	Cys	Thr	Ser	Glu	Glu	Ile	Asp	
		35					40					45				
His	Glu	Asp	Ile	Thr	Lys	Asp	Lys	Thr	Ser	Thr	Val	Glu	Ala	Cys	Leu	
50						55					60					
Pro	Leu	Glu	Leu	Thr	Lys	Asn	Glu	Ser	Cys	Leu	Asn	Ser	Arg	Glu	Thr	
65				70						75					80	
Ser	Phe	Ile	Thr	Asn	Gly	Ser	Cys	Leu	Ala	Ser	Arg	Lys	Thr	Ser	Phe	
			85						90					95		
Met	Met	Ala	Leu	Cys	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Lys	Ile	Tyr	
			100					105						110		
Gln	Val	Glu	Phe	Lys	Thr	Met	Asn	Ala	Lys	Leu	Leu	Met	Asp	Pro	Lys	
		115					120						125			
Arg	Gln	Ile	Phe	Leu	Asp	Gln	Asn	Met	Leu	Ala	Val	Ile	Asp	Glu	Leu	
	130					135					140					
Met	Gln	Ala	Leu	Asn	Phe	Asn	Ser	Glu	Thr	Val	Pro	Gln	Lys	Ser	Ser	
145				150						155					160	
Leu	Glu	Glu	Pro	Asp	Phe	Tyr	Lys	Thr	Lys	Ile	Lys	Leu	Cys	Ile	Leu	
			165						170					175		
Leu	His	Ala	Phe	Arg	Ile	Arg	Ala	Val	Thr	Ile	Asp	Arg	Val	Met	Ser	
		180						185					190			
Tyr	Leu	Asn	Ala	Ser												
		195														

<210> 833  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 833	Arg	Asn	Leu	Pro	Val	Ala	Thr	Pro	Asp	Pro	Gly	Met	Phe	Pro	Cys	Leu
1				5						10					15	
His	His	Ser	Gln	Asn	Leu	Leu	Arg	Ala	Val	Ser	Asn	Met	Leu	Gln	Lys	
		20						25					30			

Ala	Arg	Gln	Thr	Leu		Phe	Tyr	Pro	Cys	Thr	Ser	Glu	Glu		Asp
		35					40					45			
His	Glu	Asp	Ile	Thr	Lys	Asp	Lys	Thr	Ser	Thr	Val	Glu	Ala	Cys	Leu
	50					55					60				
Pro	Leu	Glu	Leu	Thr	Lys	Asn	Glu	Ser	Cys	Leu	Asn	Ser	Arg	Glu	Thr
65					70				75						80
Ser	Phe	Ile	Thr	Asn	Gly	Ser	Cys	Leu	Ala	Ser	Arg	Lys	Thr	Ser	Phe
			85						90					95	
Met	Met	Ala	Leu	Cys	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Lys	Met	Tyr
			100					105					110		
Gln	Val	Gln	Phe	Lys	Thr	Met	Asn	Ala	Lys	Leu	Leu	Met	Asp	Pro	Lys
		115					120					125			
Arg	Gln	Ile	Phe	Leu	Asp	Gln	Asn	Met	Leu	Ala	Val	Ile	Asp	Glu	Leu
	130					135					140				
Met	Gln	Ala	Leu	Asn	Phe	Asn	Ser	Glu	Thr	Val	Pro	Gln	Lys	Ser	Ser
145				150					155						160
Leu	Glu	Glu	Pro	Asp	Phe	Tyr	Lys	Thr	Lys	Ile	Lys	Leu	Cys	Ile	Leu
			165					170						175	
Leu	His	Ala	Phe	Arg	Ile	Arg	Ala	Val	Thr	Ile	Asp	Arg	Val	Met	Ser
		180						185					190		
Tyr	Leu	Asn	Ala	Ser											
		195													

<210> 834

<211> 197

<212> PRT

<213> Homo sapiens

<400> 834

Arg	Asn	Leu	Pro	Val	Ala	Thr	Pro	Asp	Pro	Gly	Met	Phe	Pro	Cys	Leu
1				5					10					15	
His	His	Ser	Gln	Asn	Leu	Leu	Arg	Ala	Val	Ser	Asn	Met	Leu	Gln	Lys
			20					25					30		
Ala	Arg	Gln	Thr	Leu	Glu	Phe	Tyr	Pro	Cys	Thr	Ser	Glu	Glu	Ile	Asp
	35						40					45			
His	Glu	Asp	Ile	Thr	Lys	Asp	Lys	Thr	Ser	Thr	Val	Glu	Ala	Cys	Leu
	50					55					60				
Pro	Leu	Glu	Leu	Thr	Lys	Asn	Glu	Ser	Cys	Leu	Asn	Ser	Arg	Glu	Thr
65					70				75						80
Ser	Phe	Ile	Thr	Asn	Gly	Ser	Cys	Leu	Ala	Ser	Arg	Lys	Thr	Ser	Phe
			85						90					95	
Met	Met	Ala	Leu	Cys	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Lys	Met	Tyr
			100					105					110		
Gln	Val	Asn	Phe	Lys	Thr	Met	Asn	Ala	Lys	Leu	Leu	Met	Asp	Pro	Lys
		115					120					125			
Arg	Gln	Ile	Phe	Leu	Asp	Gln	Asn	Met	Leu	Ala	Val	Ile	Asp	Glu	Leu
	130					135					140				
Met	Gln	Ala	Leu	Asn	Phe	Asn	Ser	Glu	Thr	Val	Pro	Gln	Lys	Ser	Ser
145				150					155						160
Leu	Glu	Glu	Pro	Asp	Phe	Tyr	Lys	Thr	Lys	Ile	Lys	Leu	Cys	Ile	Leu
			165					170						175	
Leu	His	Ala	Phe	Arg	Ile	Arg	Ala	Val	Thr	Ile	Asp	Arg	Val	Met	Ser
		180						185					190		
Tyr	Leu	Asn	Ala	Ser											
		195													

<210> 835

<211> 197

<212> PRT

<213> Homo sapiens

<400> 835

Arg	Asn	Leu	Pro	Val	Ala	Thr	Pro	Asp	Pro	Gly	Met	Phe	Pro	Cys	Leu
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

1	5	10													
His	His	Ser	Gln	Asn	Leu	Leu	Arg	Ala	Val	Ser	Asn	Met	Leu	Gln	Lys
	20							25					30		
Ala	Arg	Gln	Thr	Leu	Glu	Phe	Tyr	Pro	Cys	Thr	Ser	Glu	Glu	Ile	Asp
	35						40					45			
His	Glu	Asp	Ile	Thr	Lys	Asp	Lys	Thr	Ser	Thr	Val	Glu	Ala	Cys	Leu
	50				55						60				
Pro	Leu	Glu	Leu	Thr	Lys	Asn	Glu	Ser	Cys	Leu	Asn	Ser	Arg	Glu	Thr
65					70					75				80	
Ser	Phe	Ile	Thr	Asn	Gly	Ser	Cys	Leu	Ala	Ser	Arg	Lys	Thr	Ser	Phe
				85					90				95		
Met	Met	Ala	Leu	Cys	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Lys	Met	Tyr
		100						105					110		
Gln	Val	His	Phe	Lys	Thr	Met	Asn	Ala	Lys	Leu	Leu	Met	Asp	Pro	Lys
	115					120						125			
Arg	Gln	Ile	Phe	Leu	Asp	Gln	Asn	Met	Leu	Ala	Val	Ile	Asp	Glu	Leu
	130				135					140					
Met	Gln	Ala	Leu	Asn	Phe	Asn	Ser	Glu	Thr	Val	Pro	Gln	Lys	Ser	Ser
145				150						155				160	
Leu	Glu	Glu	Pro	Asp	Phe	Tyr	Lys	Thr	Lys	Ile	Lys	Leu	Cys	Ile	Leu
			165						170					175	
Leu	His	Ala	Phe	Arg	Ile	Arg	Ala	Val	Thr	Ile	Asp	Arg	Val	Met	Ser
		180						185					190		
Tyr	Leu	Asn	Ala	Ser											
	195														

<210> 836  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 836															
Arg	Asn	Leu	Pro	Val	Ala	Thr	Pro	Asp	Pro	Gly	Met	Phe	Pro	Cys	Leu
1				5					10					15	
His	His	Ser	Gln	Asn	Leu	Leu	Arg	Ala	Val	Ser	Asn	Met	Leu	Gln	Lys
		20						25					30		
Ala	Arg	Gln	Thr	Leu	Glu	Phe	Tyr	Pro	Cys	Thr	Ser	Glu	Glu	Ile	Asp
	35						40					45			
His	Glu	Asp	Ile	Thr	Lys	Asp	Lys	Thr	Ser	Thr	Val	Glu	Ala	Cys	Leu
	50				55						60				
Pro	Leu	Glu	Leu	Thr	Lys	Asn	Glu	Ser	Cys	Leu	Asn	Ser	Arg	Glu	Thr
65					70					75				80	
Ser	Phe	Ile	Thr	Asn	Gly	Ser	Cys	Leu	Ala	Ser	Arg	Lys	Thr	Ser	Phe
				85					90				95		
Met	Met	Ala	Leu	Cys	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Lys	Met	Tyr
		100						105					110		
Gln	Val	Glu	Phe	Gln	Thr	Met	Asn	Ala	Lys	Leu	Leu	Met	Asp	Pro	Lys
	115					120						125			
Arg	Gln	Ile	Phe	Leu	Asp	Gln	Asn	Met	Leu	Ala	Val	Ile	Asp	Glu	Leu
	130				135					140					
Met	Gln	Ala	Leu	Asn	Phe	Asn	Ser	Glu	Thr	Val	Pro	Gln	Lys	Ser	Ser
145				150						155				160	
Leu	Glu	Glu	Pro	Asp	Phe	Tyr	Lys	Thr	Lys	Ile	Lys	Leu	Cys	Ile	Leu
			165						170					175	
Leu	His	Ala	Phe	Arg	Ile	Arg	Ala	Val	Thr	Ile	Asp	Arg	Val	Met	Ser
		180						185					190		
Tyr	Leu	Asn	Ala	Ser											
	195														

<210> 837  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens



<400> 837

Arg	Asn	Leu	Pro	Val	Ala	Thr	Pro	Asp	Pro	Gly	Met	Phe	Pro	Cys	Leu
1				5					10					15	
His	His	Ser	Gln	Asn	Leu	Leu	Arg	Ala	Val	Ser	Asn	Met	Leu	Gln	Lys
			20					25					30		
Ala	Arg	Gln	Thr	Leu	Glu	Phe	Tyr	Pro	Cys	Thr	Ser	Glu	Glu	Ile	Asp
		35					40					45			
His	Glu	Asp	Ile	Thr	Lys	Asp	Lys	Thr	Ser	Thr	Val	Glu	Ala	Cys	Leu
	50					55					60				
Pro	Leu	Glu	Leu	Thr	Lys	Asn	Glu	Ser	Cys	Leu	Asn	Ser	Arg	Glu	Thr
65					70					75				80	
Ser	Phe	Ile	Thr	Asn	Gly	Ser	Cys	Leu	Ala	Ser	Arg	Lys	Thr	Ser	Phe
				85					90					95	
Met	Met	Ala	Leu	Cys	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Lys	Met	Tyr
			100					105					110		
Gln	Val	Glu	Phe	Asn	Thr	Met	Asn	Ala	Lys	Leu	Leu	Met	Asp	Pro	Lys
		115					120					125			
Arg	Gln	Ile	Phe	Leu	Asp	Gln	Asn	Met	Leu	Ala	Val	Ile	Asp	Glu	Leu
		130				135					140				
Met	Gln	Ala	Leu	Asn	Phe	Asn	Ser	Glu	Thr	Val	Pro	Gln	Lys	Ser	Ser
145					150					155				160	
Leu	Glu	Glu	Pro	Asp	Phe	Tyr	Lys	Thr	Lys	Ile	Lys	Leu	Cys	Ile	Leu
				165					170					175	
Leu	His	Ala	Phe	Arg	Ile	Arg	Ala	Val	Thr	Ile	Asp	Arg	Val	Met	Ser
			180					185					190		
Tyr	Leu	Asn	Ala	Ser											
				195											

<210> 838

<211> 197

<212> PRT

<213> Homo sapiens

<400> 838

Arg	Asn	Leu	Pro	Val	Ala	Thr	Pro	Asp	Pro	Gly	Met	Phe	Pro	Cys	Leu
1				5					10					15	
His	His	Ser	Gln	Asn	Leu	Leu	Arg	Ala	Val	Ser	Asn	Met	Leu	Gln	Lys
			20					25					30		
Ala	Arg	Gln	Thr	Leu	Glu	Phe	Tyr	Pro	Cys	Thr	Ser	Glu	Glu	Ile	Asp
		35					40					45			
His	Glu	Asp	Ile	Thr	Lys	Asp	Lys	Thr	Ser	Thr	Val	Glu	Ala	Cys	Leu
	50					55					60				
Pro	Leu	Glu	Leu	Thr	Lys	Asn	Glu	Ser	Cys	Leu	Asn	Ser	Arg	Glu	Thr
65					70					75				80	
Ser	Phe	Ile	Thr	Asn	Gly	Ser	Cys	Leu	Ala	Ser	Arg	Lys	Thr	Ser	Phe
				85					90					95	
Met	Met	Ala	Leu	Cys	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Lys	Met	Tyr
			100					105					110		
Gln	Val	Glu	Phe	Lys	Thr	Met	Asn	Ala	Lys	Leu	Val	Met	Asp	Pro	Lys
		115					120					125			
Arg	Gln	Ile	Phe	Leu	Asp	Gln	Asn	Met	Leu	Ala	Val	Ile	Asp	Glu	Leu
		130				135					140				
Met	Gln	Ala	Leu	Asn	Phe	Asn	Ser	Glu	Thr	Val	Pro	Gln	Lys	Ser	Ser
145					150					155				160	
Leu	Glu	Glu	Pro	Asp	Phe	Tyr	Lys	Thr	Lys	Ile	Lys	Leu	Cys	Ile	Leu
				165					170					175	
Leu	His	Ala	Phe	Arg	Ile	Arg	Ala	Val	Thr	Ile	Asp	Arg	Val	Met	Ser
			180					185					190		
Tyr	Leu	Asn	Ala	Ser											
				195											

<210> 839

<211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 839

Arg	Asn	Leu	Pro	Val	Ala	Thr	Pro	Asp	Pro	Gly	Met	Phe	Pro	Cys	Leu
1				5					10					15	
His	His	Ser	Gln	Asn	Leu	Leu	Arg	Ala	Val	Ser	Asn	Met	Leu	Gln	Lys
			20					25					30		
Ala	Arg	Gln	Thr	Leu	Glu	Phe	Tyr	Pro	Cys	Thr	Ser	Glu	Glu	Ile	Asp
		35					40					45			
His	Glu	Asp	Ile	Thr	Lys	Asp	Lys	Thr	Ser	Thr	Val	Glu	Ala	Cys	Leu
		50				55					60				
Pro	Leu	Glu	Leu	Thr	Lys	Asn	Glu	Ser	Cys	Leu	Asn	Ser	Arg	Glu	Thr
65					70					75					80
Ser	Phe	Ile	Thr	Asn	Gly	Ser	Cys	Leu	Ala	Ser	Arg	Lys	Thr	Ser	Phe
				85					90					95	
Met	Met	Ala	Leu	Cys	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Lys	Met	Tyr
			100					105					110		
Gln	Val	Glu	Phe	Lys	Thr	Met	Asn	Ala	Lys	Leu	Ile	Met	Asp	Pro	Lys
		115					120						125		
Arg	Gln	Ile	Phe	Leu	Asp	Gln	Asn	Met	Leu	Ala	Val	Ile	Asp	Glu	Leu
		130				135					140				
Met	Gln	Ala	Leu	Asn	Phe	Asn	Ser	Glu	Thr	Val	Pro	Gln	Lys	Ser	Ser
145					150					155					160
Leu	Glu	Glu	Pro	Asp	Phe	Tyr	Lys	Thr	Lys	Ile	Lys	Leu	Cys	Ile	Leu
				165					170					175	
Leu	His	Ala	Phe	Arg	Ile	Arg	Ala	Val	Thr	Ile	Asp	Arg	Val	Met	Ser
			180					185					190		
Tyr	Leu	Asn	Ala	Ser											
				195											

<210> 840  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 840

Arg	Asn	Leu	Pro	Val	Ala	Thr	Pro	Asp	Pro	Gly	Met	Phe	Pro	Cys	Leu
1				5					10					15	
His	His	Ser	Gln	Asn	Leu	Leu	Arg	Ala	Val	Ser	Asn	Met	Leu	Gln	Lys
			20					25					30		
Ala	Arg	Gln	Thr	Leu	Glu	Phe	Tyr	Pro	Cys	Thr	Ser	Glu	Glu	Ile	Asp
		35					40					45			
His	Glu	Asp	Ile	Thr	Lys	Asp	Lys	Thr	Ser	Thr	Val	Glu	Ala	Cys	Leu
		50				55					60				
Pro	Leu	Glu	Leu	Thr	Lys	Asn	Glu	Ser	Cys	Leu	Asn	Ser	Arg	Glu	Thr
65					70					75					80
Ser	Phe	Ile	Thr	Asn	Gly	Ser	Cys	Leu	Ala	Ser	Arg	Lys	Thr	Ser	Phe
				85					90					95	
Met	Met	Ala	Leu	Cys	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Lys	Met	Tyr
			100					105					110		
Gln	Val	Glu	Phe	Lys	Thr	Met	Asn	Ala	Lys	Leu	Leu	Val	Asp	Pro	Lys
		115					120						125		
Arg	Gln	Ile	Phe	Leu	Asp	Gln	Asn	Met	Leu	Ala	Val	Ile	Asp	Glu	Leu
		130				135					140				
Met	Gln	Ala	Leu	Asn	Phe	Asn	Ser	Glu	Thr	Val	Pro	Gln	Lys	Ser	Ser
145					150					155					160
Leu	Glu	Glu	Pro	Asp	Phe	Tyr	Lys	Thr	Lys	Ile	Lys	Leu	Cys	Ile	Leu
				165					170					175	
Leu	His	Ala	Phe	Arg	Ile	Arg	Ala	Val	Thr	Ile	Asp	Arg	Val	Met	Ser
			180					185					190		
Tyr	Leu	Asn	Ala	Ser											

<210> 841  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 841  
 Arg Asn Leu Pro Val Ala Thr Pro Asp Pro Gly Met Phe Pro Cys Leu  
 1 5 10 15  
 His His Ser Gln Asn Leu Leu Arg Ala Val Ser Asn Met Leu Gln Lys  
 20 25 30  
 Ala Arg Gln Thr Leu Glu Phe Tyr Pro Cys Thr Ser Glu Glu Ile Asp  
 35 40 45  
 His Glu Asp Ile Thr Lys Asp Lys Thr Ser Thr Val Glu Ala Cys Leu  
 50 55 60  
 Pro Leu Glu Leu Thr Lys Asn Glu Ser Cys Leu Asn Ser Arg Glu Thr  
 65 70 75 80  
 Ser Phe Ile Thr Asn Gly Ser Cys Leu Ala Ser Arg Lys Thr Ser Phe  
 85 90 95  
 Met Met Ala Leu Cys Leu Ser Ser Ile Tyr Glu Asp Leu Lys Met Tyr  
 100 105 110  
 Gln Val Glu Phe Lys Thr Met Asn Ala Lys Leu Leu Ile Asp Pro Lys  
 115 120 125  
 Arg Gln Ile Phe Leu Asp Gln Asn Met Leu Ala Val Ile Asp Glu Leu  
 130 135 140  
 Met Gln Ala Leu Asn Phe Asn Ser Glu Thr Val Pro Gln Lys Ser Ser  
 145 150 155 160  
 Leu Glu Glu Pro Asp Phe Tyr Lys Thr Lys Ile Lys Leu Cys Ile Leu  
 165 170 175  
 Leu His Ala Phe Arg Ile Arg Ala Val Thr Ile Asp Arg Val Met Ser  
 180 185 190  
 Tyr Leu Asn Ala Ser  
 195

<210> 842  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 842  
 Arg Asn Leu Pro Val Ala Thr Pro Asp Pro Gly Met Phe Pro Cys Leu  
 1 5 10 15  
 His His Ser Gln Asn Leu Leu Arg Ala Val Ser Asn Met Leu Gln Lys  
 20 25 30  
 Ala Arg Gln Thr Leu Glu Phe Tyr Pro Cys Thr Ser Glu Glu Ile Asp  
 35 40 45  
 His Glu Asp Ile Thr Lys Asp Lys Thr Ser Thr Val Glu Ala Cys Leu  
 50 55 60  
 Pro Leu Glu Leu Thr Lys Asn Glu Ser Cys Leu Asn Ser Arg Glu Thr  
 65 70 75 80  
 Ser Phe Ile Thr Asn Gly Ser Cys Leu Ala Ser Arg Lys Thr Ser Phe  
 85 90 95  
 Met Met Ala Leu Cys Leu Ser Ser Ile Tyr Glu Asp Leu Lys Met Tyr  
 100 105 110  
 Gln Val Glu Phe Lys Thr Met Asn Ala Lys Leu Leu Met Asp Ser Lys  
 115 120 125  
 Arg Gln Ile Phe Leu Asp Gln Asn Met Leu Ala Val Ile Asp Glu Leu  
 130 135 140  
 Met Gln Ala Leu Asn Phe Asn Ser Glu Thr Val Pro Gln Lys Ser Ser  
 145 150 155 160  
 Leu Glu Glu Pro Asp Phe Tyr Lys Thr Lys Ile Lys Leu Cys Ile Leu  
 165 170 175



[illegible]

His Gln Ile Phe Leu 130 Gln Asn Met Leu Ala Val Ile Asp 140 Leu  
 130 135 140  
 Met Gln Ala Leu Asn Phe Asn Ser Glu Thr Val Pro Gln Lys Ser Ser  
 145 150 155 160  
 Leu Glu Glu Pro Asp Phe Tyr Lys Thr Lys Ile Lys Leu Cys Ile Leu  
 165 170 175  
 Leu His Ala Phe Arg Ile Arg Ala Val Thr Ile Asp Arg Val Met Ser  
 180 185 190  
 Tyr Leu Asn Ala Ser  
 195

<210> 847  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 847  
 Arg Asn Leu Pro Val Ala Thr Pro Asp Pro Gly Met Phe Pro Cys Leu  
 1 5 10 15  
 His His Ser Gln Asn Leu Leu Arg Ala Val Ser Asn Met Leu Gln Lys  
 20 25 30  
 Ala Arg Gln Thr Leu Glu Phe Tyr Pro Cys Thr Ser Glu Glu Ile Asp  
 35 40 45  
 His Glu Asp Ile Thr Lys Asp Lys Thr Ser Thr Val Glu Ala Cys Leu  
 50 55 60  
 Pro Leu Glu Leu Thr Lys Asn Glu Ser Cys Leu Asn Ser Arg Glu Thr  
 65 70 75 80  
 Ser Phe Ile Thr Asn Gly Ser Cys Leu Ala Ser Arg Lys Thr Ser Phe  
 85 90 95  
 Met Met Ala Leu Cys Leu Ser Ser Ile Tyr Glu Asp Leu Lys Met Tyr  
 100 105 110  
 Gln Val Glu Phe Lys Thr Met Asn Ala Lys Leu Leu Met Asp Pro Lys  
 115 120 125  
 Gln Gln Ile Phe Leu Asp Gln Asn Met Leu Ala Val Ile Asp Glu Leu  
 130 135 140  
 Met Gln Ala Leu Asn Phe Asn Ser Glu Thr Val Pro Gln Lys Ser Ser  
 145 150 155 160  
 Leu Glu Glu Pro Asp Phe Tyr Lys Thr Lys Ile Lys Leu Cys Ile Leu  
 165 170 175  
 Leu His Ala Phe Arg Ile Arg Ala Val Thr Ile Asp Arg Val Met Ser  
 180 185 190  
 Tyr Leu Asn Ala Ser  
 195

<210> 848  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 848  
 Arg Asn Leu Pro Val Ala Thr Pro Asp Pro Gly Met Phe Pro Cys Leu  
 1 5 10 15  
 His His Ser Gln Asn Leu Leu Arg Ala Val Ser Asn Met Leu Gln Lys  
 20 25 30  
 Ala Arg Gln Thr Leu Glu Phe Tyr Pro Cys Thr Ser Glu Glu Ile Asp  
 35 40 45  
 His Glu Asp Ile Thr Lys Asp Lys Thr Ser Thr Val Glu Ala Cys Leu  
 50 55 60  
 Pro Leu Glu Leu Thr Lys Asn Glu Ser Cys Leu Asn Ser Arg Glu Thr  
 65 70 75 80  
 Ser Phe Ile Thr Asn Gly Ser Cys Leu Ala Ser Arg Lys Thr Ser Phe  
 85 90 95  
 Met Met Ala Leu Cys Leu Ser Ser Ile Tyr Glu Asp Leu Lys Met Tyr



Leu	Leu	Ile	Gln	Ser	Asp	Leu	Glu	Pro	Val	Gln	Phe	Leu	Arg	Ser	Val
				85					90						95
Phe	Ala	Asn	Ser	Leu	Val	Tyr	Gly	Ala	Ser	Asp	Ser	Asn	Val	Tyr	Asp
			100					105					110		
Leu	Leu	Lys	Asp	Leu	Glu	Glu	Gly	Ile	Gln	Thr	Leu	Met	Gly	Arg	Leu
		115					120					125			
Glu	Asp	Gly	Ser	Pro	Arg	Thr	Gly	Gln	Ile	Phe	Lys	Gln	Thr	Tyr	Ser
	130					135					140				
Lys	Phe	Asp	Thr	Asn	Ser	His	Asn	Asp	Asp	Ala	Leu	Leu	Lys	Asn	Tyr
145				150						155					160
Gly	Leu	Leu	Tyr	Cys	Phe	Arg	Lys	Asp	Met	Asp	Lys	Val	Glu	Thr	Phe
			165						170					175	
Leu	Arg	Ile	Val	Gln	Cys	Arg	Ser	Val	Glu	Gly	Ser	Cys	Gly	Phe	
			180					185					190		

<210> 851  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 851															
Phe	Pro	Thr	Ile	Pro	Leu	Ser	Arg	Leu	Phe	Asp	Asn	Ala	Met	Leu	Arg
1				5					10					15	
Ala	His	Arg	Leu	His	Gln	Leu	Ala	Phe	Asp	Thr	Tyr	Gln	Glu	Phe	Glu
			20					25					30		
Glu	Ala	Tyr	Ile	Pro	Lys	Glu	Gln	Lys	Tyr	Ser	Phe	Leu	Gln	Asn	Pro
	35					40						45			
Gln	Thr	Ser	Leu	Cys	Phe	Ser	Asn	Ser	Ile	Pro	Thr	Pro	Ser	Asn	Arg
	50					55					60				
Glu	Glu	Thr	Gln	Gln	Lys	Ser	Asn	Leu	Glu	Leu	Leu	Arg	Ile	Ser	Leu
65					70					75					80
Leu	Leu	Ile	Gln	Ser	Trp	Leu	Glu	Pro	Val	Gln	Phe	Leu	Arg	Ser	Val
			85					90						95	
Phe	Ala	Asn	Ser	Leu	Val	Tyr	Gly	Ala	Ser	Asp	Ser	Asn	Val	Tyr	Asp
			100					105					110		
Leu	Leu	Lys	Asp	Leu	Glu	Glu	Gly	Ile	Gln	Thr	Leu	Met	Gly	Arg	Leu
		115					120					125			
Glu	Asp	Gly	Ser	Pro	Arg	Thr	Gly	Gln	Ile	Phe	Lys	Gln	Thr	Tyr	Ser
	130					135					140				
Lys	Phe	Asp	Thr	Asn	Ser	His	Asn	Asp	Asp	Ala	Leu	Leu	Lys	Asn	Tyr
145				150						155					160
Gly	Leu	Leu	Tyr	Cys	Phe	Arg	Lys	Asp	Met	Asp	Lys	Val	Glu	Thr	Phe
			165						170					175	
Leu	Arg	Ile	Val	Gln	Cys	Arg	Ser	Val	Glu	Gly	Ser	Cys	Gly	Phe	
			180					185					190		

<210> 852  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 852															
Phe	Pro	Thr	Ile	Pro	Leu	Ser	Arg	Leu	Phe	Asp	Asn	Ala	Met	Leu	Arg
1				5					10					15	
Ala	His	Arg	Leu	His	Gln	Leu	Ala	Phe	Asp	Thr	Tyr	Gln	Glu	Phe	Glu
			20					25					30		
Glu	Ala	Tyr	Ile	Pro	Lys	Glu	Gln	Lys	Tyr	Ser	Phe	Leu	Gln	Asn	Pro
	35					40						45			
Gln	Thr	Ser	Leu	Cys	Phe	Ser	His	Ser	Ile	Pro	Thr	Pro	Ser	Asn	Arg
	50					55					60				
Glu	Glu	Thr	Gln	Gln	Lys	Ser	Asn	Leu	Glu	Leu	Leu	Arg	Ile	Ser	Leu
65					70					75					80
Leu	Leu	Ile	Gln	Ser	Trp	Leu	Glu	Pro	Val	Gln	Phe	Leu	Arg	Ser	Val





Phe	Ala	Asn	Ser	Leu	Val	Tyr	Gly	Ala	Ser	Asp	Ser	Asn	Val	Tyr	Asp
		100						105					110		
Leu	Leu	Lys	Asp	Leu	Glu	Glu	Gly	Ile	Gln	Thr	Leu	Met	Gly	Arg	Leu
		115					120					125			
Glu	Asp	Gly	Ser	Pro	Arg	Thr	Gly	Gln	Ile	Phe	Lys	Gln	Thr	Tyr	Ser
		130					135				140				
Lys	Phe	Asp	Thr	Asn	Ser	His	Asn	Asp	Asp	Ala	Leu	Leu	Lys	Asn	Tyr
		145			150					155					160
Gly	Leu	Leu	Tyr	Cys	Phe	Arg	Lys	Asp	Met	Asp	Lys	Val	Glu	Thr	Phe
			165					170						175	
Leu	Arg	Ile	Val	Gln	Cys	Arg	Ser	Val	Glu	Gly	Ser	Cys	Gly	Phe	
			180					185					190		

<210> 855  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 855															
Phe	Pro	Thr	Ile	Pro	Leu	Ser	Arg	Leu	Phe	Asp	Asn	Ala	Met	Leu	Arg
1				5					10					15	
Ala	His	Arg	Leu	His	Gln	Leu	Ala	Phe	Asp	Thr	Tyr	Gln	Glu	Phe	Glu
			20					25					30		
Glu	Ala	Tyr	Ile	Pro	Lys	Glu	Gln	Lys	Tyr	Ser	Phe	Leu	Gln	Asn	Pro
			35				40					45			
Gln	Thr	Ser	Leu	Cys	Phe	Ser	Glu	Ser	Ile	Pro	Thr	Pro	Ser	Asn	His
			50			55				60					
Glu	Glu	Thr	Gln	Gln	Lys	Ser	Asn	Leu	Glu	Leu	Leu	Arg	Ile	Ser	Leu
					70				75					80	
Leu	Leu	Ile	Gln	Ser	Trp	Leu	Glu	Pro	Val	Gln	Phe	Leu	Arg	Ser	Val
				85				90					95		
Phe	Ala	Asn	Ser	Leu	Val	Tyr	Gly	Ala	Ser	Asp	Ser	Asn	Val	Tyr	Asp
			100					105					110		
Leu	Leu	Lys	Asp	Leu	Glu	Glu	Gly	Ile	Gln	Thr	Leu	Met	Gly	Arg	Leu
			115				120					125			
Glu	Asp	Gly	Ser	Pro	Arg	Thr	Gly	Gln	Ile	Phe	Lys	Gln	Thr	Tyr	Ser
			130				135				140				
Lys	Phe	Asp	Thr	Asn	Ser	His	Asn	Asp	Asp	Ala	Leu	Leu	Lys	Asn	Tyr
				150						155					160
Gly	Leu	Leu	Tyr	Cys	Phe	Arg	Lys	Asp	Met	Asp	Lys	Val	Glu	Thr	Phe
				165				170						175	
Leu	Arg	Ile	Val	Gln	Cys	Arg	Ser	Val	Glu	Gly	Ser	Cys	Gly	Phe	
			180					185					190		

<210> 856  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 856															
Phe	Pro	Thr	Ile	Pro	Leu	Ser	Arg	Leu	Phe	Asp	Asn	Ala	Met	Leu	Arg
1				5					10					15	
Ala	His	Arg	Leu	His	Gln	Leu	Ala	Phe	Asp	Thr	Tyr	Gln	Glu	Phe	Glu
			20					25					30		
Glu	Ala	Tyr	Ile	Pro	Lys	Glu	Gln	Lys	Tyr	Ser	Phe	Leu	Gln	Asn	Pro
			35				40					45			
Gln	Thr	Ser	Leu	Cys	Phe	Ser	Glu	Ser	Ile	Pro	Thr	Pro	Ser	Asn	Gln
			50			55				60					
Glu	Glu	Thr	Gln	Gln	Lys	Ser	Asn	Leu	Glu	Leu	Leu	Arg	Ile	Ser	Leu
					70				75					80	
Leu	Leu	Ile	Gln	Ser	Trp	Leu	Glu	Pro	Val	Gln	Phe	Leu	Arg	Ser	Val
				85				90					95		
Phe	Ala	Asn	Ser	Leu	Val	Tyr	Gly	Ala	Ser	Asp	Ser	Asn	Val	Tyr	Asp

100	105	110
Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln Thr Leu Met Gly Arg Leu		
115	120	125
Glu Asp Gly Ser Pro Arg Thr Gly Gln Ile Phe Lys Gln Thr Tyr Ser		
130	135	140
Lys Phe Asp Thr Asn Ser His Asn Asp Asp Ala Leu Leu Lys Asn Tyr		
145	150	155
Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met Asp Lys Val Glu Thr Phe		
165	170	175
Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe		
180	185	190

<210> 857  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 857

Phe Pro Thr Ile Pro Leu Ser Arg Leu Phe Asp Asn Ala Met Leu Arg	
1 5 10 15	
Ala His Arg Leu His Gln Leu Ala Phe Asp Thr Tyr Gln Glu Phe Glu	
20 25 30	
Glu Ala Tyr Ile Pro Lys Glu Gln Lys Tyr Ser Phe Leu Gln Asn Pro	
35 40 45	
Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile Pro Thr Pro Ser Asn Arg	
50 55 60	
Gln Glu Thr Gln Gln Lys Ser Asn Leu Glu Leu Leu Arg Ile Ser Leu	
65 70 75 80	
Leu Leu Ile Gln Ser Trp Leu Glu Pro Val Gln Phe Leu Arg Ser Val	
85 90 95	
Phe Ala Asn Ser Leu Val Tyr Gly Ala Ser Asp Ser Asn Val Tyr Asp	
100 105 110	
Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln Thr Leu Met Gly Arg Leu	
115 120 125	
Glu Asp Gly Ser Pro Arg Thr Gly Gln Ile Phe Lys Gln Thr Tyr Ser	
130 135 140	
Lys Phe Asp Thr Asn Ser His Asn Asp Asp Ala Leu Leu Lys Asn Tyr	
145 150 155 160	
Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met Asp Lys Val Glu Thr Phe	
165 170 175	
Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe	
180 185 190	

<210> 858  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 858

Phe Pro Thr Ile Pro Leu Ser Arg Leu Phe Asp Asn Ala Met Leu Arg	
1 5 10 15	
Ala His Arg Leu His Gln Leu Ala Phe Asp Thr Tyr Gln Glu Phe Glu	
20 25 30	
Glu Ala Tyr Ile Pro Lys Glu Gln Lys Tyr Ser Phe Leu Gln Asn Pro	
35 40 45	
Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile Pro Thr Pro Ser Asn Arg	
50 55 60	
Asn Glu Thr Gln Gln Lys Ser Asn Leu Glu Leu Leu Arg Ile Ser Leu	
65 70 75 80	
Leu Leu Ile Gln Ser Trp Leu Glu Pro Val Gln Phe Leu Arg Ser Val	
85 90 95	
Phe Ala Asn Ser Leu Val Tyr Gly Ala Ser Asp Ser Asn Val Tyr Asp	
100 105 110	

Leu	Leu	Lys	Asp	Leu	Leu	Glu	Gly	Ile	Gln	Thr	Leu	Met	Gly	Arg	Leu
		115					120					125			
Glu	Asp	Gly	Ser	Pro	Arg	Thr	Gly	Gln	Ile	Phe	Lys	Gln	Thr	Tyr	Ser
		130				135					140				
Lys	Phe	Asp	Thr	Asn	Ser	His	Asn	Asp	Asp	Ala	Leu	Leu	Lys	Asn	Tyr
		145			150					155					160
Gly	Leu	Leu	Tyr	Cys	Phe	Arg	Lys	Asp	Met	Asp	Lys	Val	Glu	Thr	Phe
			165					170						175	
Leu	Arg	Ile	Val	Gln	Cys	Arg	Ser	Val	Glu	Gly	Ser	Cys	Gly	Phe	
			180					185					190		

<210> 859  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

Phe	Pro	Thr	Ile	Pro	Leu	Ser	Arg	Leu	Phe	Asp	Asn	Ala	Met	Leu	Arg
1				5					10					15	
Ala	His	Arg	Leu	His	Gln	Leu	Ala	Phe	Asp	Thr	Tyr	Gln	Glu	Phe	Glu
			20					25					30		
Glu	Ala	Tyr	Ile	Pro	Lys	Glu	Gln	Lys	Tyr	Ser	Phe	Leu	Gln	Asn	Pro
		35				40						45			
Gln	Thr	Ser	Leu	Cys	Phe	Ser	Glu	Ser	Ile	Pro	Thr	Pro	Ser	Asn	Arg
		50				55					60				
His	Glu	Thr	Gln	Gln	Lys	Ser	Asn	Leu	Glu	Leu	Leu	Arg	Ile	Ser	Leu
65					70				75						80
Leu	Leu	Ile	Gln	Ser	Trp	Leu	Glu	Pro	Val	Gln	Phe	Leu	Arg	Ser	Val
			85					90						95	
Phe	Ala	Asn	Ser	Leu	Val	Tyr	Gly	Ala	Ser	Asp	Ser	Asn	Val	Tyr	Asp
			100					105					110		
Leu	Leu	Lys	Asp	Leu	Glu	Glu	Gly	Ile	Gln	Thr	Leu	Met	Gly	Arg	Leu
		115					120					125			
Glu	Asp	Gly	Ser	Pro	Arg	Thr	Gly	Gln	Ile	Phe	Lys	Gln	Thr	Tyr	Ser
		130				135					140				
Lys	Phe	Asp	Thr	Asn	Ser	His	Asn	Asp	Asp	Ala	Leu	Leu	Lys	Asn	Tyr
145					150					155					160
Gly	Leu	Leu	Tyr	Cys	Phe	Arg	Lys	Asp	Met	Asp	Lys	Val	Glu	Thr	Phe
			165					170						175	
Leu	Arg	Ile	Val	Gln	Cys	Arg	Ser	Val	Glu	Gly	Ser	Cys	Gly	Phe	
			180					185					190		

<210> 860  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

Phe	Pro	Thr	Ile	Pro	Leu	Ser	Arg	Leu	Phe	Asp	Asn	Ala	Met	Leu	Arg
1				5					10					15	
Ala	His	Arg	Leu	His	Gln	Leu	Ala	Phe	Asp	Thr	Tyr	Gln	Glu	Phe	Glu
			20					25					30		
Glu	Ala	Tyr	Ile	Pro	Lys	Glu	Gln	Lys	Tyr	Ser	Phe	Leu	Gln	Asn	Pro
		35				40						45			
Gln	Thr	Ser	Leu	Cys	Phe	Ser	Glu	Ser	Ile	Pro	Thr	Pro	Ser	Asn	Arg
		50				55					60				
Glu	Gln	Thr	Gln	Gln	Lys	Ser	Asn	Leu	Glu	Leu	Leu	Arg	Ile	Ser	Leu
65					70				75						80
Leu	Leu	Ile	Gln	Ser	Trp	Leu	Glu	Pro	Val	Gln	Phe	Leu	Arg	Ser	Val
			85					90						95	
Phe	Ala	Asn	Ser	Leu	Val	Tyr	Gly	Ala	Ser	Asp	Ser	Asn	Val	Tyr	Asp
			100					105					110		
Leu	Leu	Lys	Asp	Leu	Glu	Glu	Gly	Ile	Gln	Thr	Leu	Met	Gly	Arg	Leu

115	120	125
Glu Asp Gly Ser Pro Arg Thr Gly Gln Ile Phe Lys Gln Thr Tyr Ser		
130	135	140
Lys Phe Asp Thr Asn Ser His Asn Asp Asp Ala Leu Leu Lys Asn Tyr		
145	150	155
Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met Asp Lys Val Glu Thr Phe		
	165	170
Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe		
180	185	190

<210> 861  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 861

Phe Pro Thr Ile Pro Leu Ser Arg Leu Phe Asp Asn Ala Met Leu Arg	
1	15
Ala His Arg Leu His Gln Leu Ala Phe Asp Thr Tyr Gln Glu Phe Glu	
20	30
Glu Ala Tyr Ile Pro Lys Glu Gln Lys Tyr Ser Phe Leu Gln Asn Pro	
35	45
Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile Pro Thr Pro Ser Asn Arg	
50	60
Glu Asn Thr Gln Gln Lys Ser Asn Leu Glu Leu Arg Ile Ser Leu	
65	80
Leu Leu Ile Gln Ser Trp Leu Glu Pro Val Gln Phe Leu Arg Ser Val	
85	95
Phe Ala Asn Ser Leu Val Tyr Gly Ala Ser Asp Ser Asn Val Tyr Asp	
100	110
Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln Thr Leu Met Gly Arg Leu	
115	125
Glu Asp Gly Ser Pro Arg Thr Gly Gln Ile Phe Lys Gln Thr Tyr Ser	
130	140
Lys Phe Asp Thr Asn Ser His Asn Asp Asp Ala Leu Leu Lys Asn Tyr	
145	155
Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met Asp Lys Val Glu Thr Phe	
	165
Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe	
180	185
	190

<210> 862  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 862

Phe Pro Thr Ile Pro Leu Ser Arg Leu Phe Asp Asn Ala Met Leu Arg	
1	15
Ala His Arg Leu His Gln Leu Ala Phe Asp Thr Tyr Gln Glu Phe Glu	
20	30
Glu Ala Tyr Ile Pro Lys Glu Gln Lys Tyr Ser Phe Leu Gln Asn Pro	
35	45
Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile Pro Thr Pro Ser Asn Arg	
50	60
Glu His Thr Gln Gln Lys Ser Asn Leu Glu Leu Arg Ile Ser Leu	
65	80
Leu Leu Ile Gln Ser Trp Leu Glu Pro Val Gln Phe Leu Arg Ser Val	
85	95
Phe Ala Asn Ser Leu Val Tyr Gly Ala Ser Asp Ser Asn Val Tyr Asp	
100	110
Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln Thr Leu Met Gly Arg Leu	
115	125

Glu	Asp	Gly	Ser	Pro	Arg	Thr	Gly	Gln	Ile	Phe	Lys	Gln	Thr	Arg	Ser
130						135					140				
Lys	Phe	Asp	Thr	Asn	Ser	His	Asn	Asp	Asp	Ala	Leu	Leu	Lys	Asn	Tyr
145					150					155					160
Gly	Leu	Leu	Tyr	Cys	Phe	Arg	Lys	Asp	Met	Asp	Lys	Val	Glu	Thr	Phe
				165					170					175	
Leu	Arg	Ile	Val	Gln	Cys	Arg	Ser	Val	Glu	Gly	Ser	Cys	Gly	Phe	
			180					185					190		

<210> 863  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 863															
Phe	Pro	Thr	Ile	Pro	Leu	Ser	Arg	Leu	Phe	Asp	Asn	Ala	Met	Leu	Arg
1				5					10					15	
Ala	His	Arg	Leu	His	Gln	Leu	Ala	Phe	Asp	Thr	Tyr	Gln	Glu	Phe	Glu
			20					25					30		
Glu	Ala	Tyr	Ile	Pro	Lys	Glu	Gln	Lys	Tyr	Ser	Phe	Leu	Gln	Asn	Pro
		35				40						45			
Gln	Thr	Ser	Leu	Cys	Phe	Ser	Glu	Ser	Ile	Pro	Thr	Pro	Ser	Asn	Arg
50						55					60				
Glu	Glu	Thr	Gln	Gln	Lys	Ser	Asn	Leu	Glu	Leu	Leu	Arg	Ile	Ser	Leu
65					70				75						80
Leu	Leu	Ile	Gln	Ser	Trp	Leu	Gln	Pro	Val	Gln	Phe	Leu	Arg	Ser	Val
			85					90					95		
Phe	Ala	Asn	Ser	Leu	Val	Tyr	Gly	Ala	Ser	Asp	Ser	Asn	Val	Tyr	Asp
			100					105					110		
Leu	Leu	Lys	Asp	Leu	Glu	Glu	Gly	Ile	Gln	Thr	Leu	Met	Gly	Arg	Leu
		115					120					125			
Glu	Asp	Gly	Ser	Pro	Arg	Thr	Gly	Gln	Ile	Phe	Lys	Gln	Thr	Tyr	Ser
		130				135					140				
Lys	Phe	Asp	Thr	Asn	Ser	His	Asn	Asp	Asp	Ala	Leu	Leu	Lys	Asn	Tyr
145					150					155					160
Gly	Leu	Leu	Tyr	Cys	Phe	Arg	Lys	Asp	Met	Asp	Lys	Val	Glu	Thr	Phe
				165					170					175	
Leu	Arg	Ile	Val	Gln	Cys	Arg	Ser	Val	Glu	Gly	Ser	Cys	Gly	Phe	
			180					185					190		

<210> 864  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 864															
Phe	Pro	Thr	Ile	Pro	Leu	Ser	Arg	Leu	Phe	Asp	Asn	Ala	Met	Leu	Arg
1				5					10					15	
Ala	His	Arg	Leu	His	Gln	Leu	Ala	Phe	Asp	Thr	Tyr	Gln	Glu	Phe	Glu
			20					25					30		
Glu	Ala	Tyr	Ile	Pro	Lys	Glu	Gln	Lys	Tyr	Ser	Phe	Leu	Gln	Asn	Pro
		35				40						45			
Gln	Thr	Ser	Leu	Cys	Phe	Ser	Glu	Ser	Ile	Pro	Thr	Pro	Ser	Asn	Arg
50						55					60				
Glu	Glu	Thr	Gln	Gln	Lys	Ser	Asn	Leu	Glu	Leu	Leu	Arg	Ile	Ser	Leu
65					70				75						80
Leu	Leu	Ile	Gln	Ser	Trp	Leu	Asn	Pro	Val	Gln	Phe	Leu	Arg	Ser	Val
			85					90					95		
Phe	Ala	Asn	Ser	Leu	Val	Tyr	Gly	Ala	Ser	Asp	Ser	Asn	Val	Tyr	Asp
			100					105					110		
Leu	Leu	Lys	Asp	Leu	Glu	Glu	Gly	Ile	Gln	Thr	Leu	Met	Gly	Arg	Leu
		115					120					125			
Glu	Asp	Gly	Ser	Pro	Arg	Thr	Gly	Gln	Ile	Phe	Lys	Gln	Thr	Tyr	Ser

130		135		140
Lys Phe Asp Thr Asn Ser His Asn Asp Asp Ala Leu Leu Lys Asn Tyr				
145		150		155
Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met Asp Lys Val Glu Thr Phe				
	165		170	175
Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe				
	180		185	190

<210> 865  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 865

Phe Pro Thr Ile Pro Leu Ser Arg Leu Phe Asp Asn Ala Met Leu Arg				
1	5		10	15
Ala His Arg Leu His Gln Leu Ala Phe Asp Thr Tyr Gln Glu Phe Glu				
	20		25	30
Glu Ala Tyr Ile Pro Lys Glu Gln Lys Tyr Ser Phe Leu Gln Asn Pro				
	35		40	45
Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile Pro Thr Pro Ser Asn Arg				
	50		55	60
Glu Glu Thr Gln Gln Lys Ser Asn Leu Glu Leu Leu Arg Ile Ser Leu				
65		70		75
Leu Leu Ile Gln Ser Trp Leu His Pro Val Gln Phe Leu Arg Ser Val				
	85		90	95
Phe Ala Asn Ser Leu Val Tyr Gly Ala Ser Asp Ser Asn Val Tyr Asp				
	100		105	110
Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln Thr Leu Met Gly Arg Leu				
	115		120	125
Glu Asp Gly Ser Pro Arg Thr Gly Gln Ile Phe Lys Gln Thr Tyr Ser				
	130		135	140
Lys Phe Asp Thr Asn Ser His Asn Asp Asp Ala Leu Leu Lys Asn Tyr				
145		150		155
Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met Asp Lys Val Glu Thr Phe				
	165		170	175
Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe				
	180		185	190

<210> 866  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 866

Phe Pro Thr Ile Pro Leu Ser Arg Leu Phe Asp Asn Ala Met Leu Arg				
1	5		10	15
Ala His Arg Leu His Gln Leu Ala Phe Asp Thr Tyr Gln Glu Phe Glu				
	20		25	30
Glu Ala Tyr Ile Pro Lys Glu Gln Lys Tyr Ser Phe Leu Gln Asn Pro				
	35		40	45
Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile Pro Thr Pro Ser Asn Arg				
	50		55	60
Glu Glu Thr Gln Gln Lys Ser Asn Leu Glu Leu Leu Arg Ile Ser Leu				
65		70		75
Leu Leu Ile Gln Ser Trp Leu Glu Pro Val Gln Ile Leu Arg Ser Val				
	85		90	95
Phe Ala Asn Ser Leu Val Tyr Gly Ala Ser Asp Ser Asn Val Tyr Asp				
	100		105	110
Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln Thr Leu Met Gly Arg Leu				
	115		120	125
Glu Asp Gly Ser Pro Arg Thr Gly Gln Ile Phe Lys Gln Thr Tyr Ser				
	130		135	140

Lys Phe Asp Thr Asn His Asn Asp Asp Ala Leu Leu Lys Tyr  
 145 150 155 160  
 Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met Asp Lys Val Glu Thr Phe  
 165 170 175  
 Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe  
 180 185 190

<210> 867  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 867  
 Phe Pro Thr Ile Pro Leu Ser Arg Leu Phe Asp Asn Ala Met Leu Arg  
 1 5 10 15  
 Ala His Arg Leu His Gln Leu Ala Phe Asp Thr Tyr Gln Glu Phe Glu  
 20 25 30  
 Glu Ala Tyr Ile Pro Lys Glu Gln Lys Tyr Ser Phe Leu Gln Asn Pro  
 35 40 45  
 Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile Pro Thr Pro Ser Asn Arg  
 50 55 60  
 Glu Glu Thr Gln Gln Lys Ser Asn Leu Glu Leu Leu Arg Ile Ser Leu  
 65 70 75 80  
 Leu Leu Ile Gln Ser Trp Leu Glu Pro Val Gln Val Leu Arg Ser Val  
 85 90 95  
 Phe Ala Asn Ser Leu Val Tyr Gly Ala Ser Asp Ser Asn Val Tyr Asp  
 100 105 110  
 Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln Thr Leu Met Gly Arg Leu  
 115 120 125  
 Glu Asp Gly Ser Pro Arg Thr Gly Gln Ile Phe Lys Gln Thr Tyr Ser  
 130 135 140  
 Lys Phe Asp Thr Asn Ser His Asn Asp Asp Ala Leu Leu Lys Asn Tyr  
 145 150 155 160  
 Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met Asp Lys Val Glu Thr Phe  
 165 170 175  
 Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe  
 180 185 190

<210> 868  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 868  
 Phe Pro Thr Ile Pro Leu Ser Arg Leu Phe Asp Asn Ala Met Leu Arg  
 1 5 10 15  
 Ala His Arg Leu His Gln Leu Ala Phe Asp Thr Tyr Gln Glu Phe Glu  
 20 25 30  
 Glu Ala Tyr Ile Pro Lys Glu Gln Lys Tyr Ser Phe Leu Gln Asn Pro  
 35 40 45  
 Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile Pro Thr Pro Ser Asn Arg  
 50 55 60  
 Glu Glu Thr Gln Gln Lys Ser Asn Leu Glu Leu Leu Arg Ile Ser Leu  
 65 70 75 80  
 Leu Leu Ile Gln Ser Trp Leu Glu Pro Val Gln Phe Leu His Ser Val  
 85 90 95  
 Phe Ala Asn Ser Leu Val Tyr Gly Ala Ser Asp Ser Asn Val Tyr Asp  
 100 105 110  
 Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln Thr Leu Met Gly Arg Leu  
 115 120 125  
 Glu Asp Gly Ser Pro Arg Thr Gly Gln Ile Phe Lys Gln Thr Tyr Ser  
 130 135 140  
 Lys Phe Asp Thr Asn Ser His Asn Asp Asp Ala Leu Leu Lys Asn Tyr



145 155 160  
 Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met Asp Lys Val Glu Thr Phe  
 165 170 175  
 Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe  
 180 185 190

<210> 869  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 869  
 Phe Pro Thr Ile Pro Leu Ser Arg Leu Phe Asp Asn Ala Met Leu Arg  
 1 5 10 15  
 Ala His Arg Leu His Gln Leu Ala Phe Asp Thr Tyr Gln Glu Phe Glu  
 20 25 30  
 Glu Ala Tyr Ile Pro Lys Glu Gln Lys Tyr Ser Phe Leu Gln Asn Pro  
 35 40 45  
 Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile Pro Thr Pro Ser Asn Arg  
 50 55 60  
 Glu Glu Thr Gln Gln Lys Ser Asn Leu Glu Leu Leu Arg Ile Ser Leu  
 65 70 75 80  
 Leu Leu Ile Gln Ser Trp Leu Glu Pro Val Gln Phe Leu Gln Ser Val  
 85 90 95  
 Phe Ala Asn Ser Leu Val Tyr Gly Ala Ser Asp Ser Asn Val Tyr Asp  
 100 105 110  
 Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln Thr Leu Met Gly Arg Leu  
 115 120 125  
 Glu Asp Gly Ser Pro Arg Thr Gly Gln Ile Phe Lys Gln Thr Tyr Ser  
 130 135 140  
 Lys Phe Asp Thr Asn Ser His Asn Asp Asp Ala Leu Leu Lys Asn Tyr  
 145 150 155 160  
 Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met Asp Lys Val Glu Thr Phe  
 165 170 175  
 Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe  
 180 185 190

<210> 870  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 870  
 Phe Pro Thr Ile Pro Leu Ser Arg Leu Phe Asp Asn Ala Met Leu Arg  
 1 5 10 15  
 Ala His Arg Leu His Gln Leu Ala Phe Asp Thr Tyr Gln Glu Phe Glu  
 20 25 30  
 Glu Ala Tyr Ile Pro Lys Glu Gln Lys Tyr Ser Phe Leu Gln Asn Pro  
 35 40 45  
 Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile Pro Thr Pro Ser Asn Arg  
 50 55 60  
 Glu Glu Thr Gln Gln Lys Ser Asn Leu Glu Leu Leu Arg Ile Ser Leu  
 65 70 75 80  
 Leu Leu Ile Gln Ser Trp Leu Glu Pro Val Gln Phe Leu Arg Ser Val  
 85 90 95  
 Phe Ala Asn Ser Val Val Tyr Gly Ala Ser Asp Ser Asn Val Tyr Asp  
 100 105 110  
 Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln Thr Leu Met Gly Arg Leu  
 115 120 125  
 Glu Asp Gly Ser Pro Arg Thr Gly Gln Ile Phe Lys Gln Thr Tyr Ser  
 130 135 140  
 Lys Phe Asp Thr Asn Ser His Asn Asp Asp Ala Leu Leu Lys Asn Tyr  
 145 150 155 160

Gly Leu Leu Tyr Cys Arg Lys Asp Met Asp Lys Val Glu Ser Phe  
 165 170 175  
 Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe  
 180 185 190

<210> 871  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 871  
 Phe Pro Thr Ile Pro Leu Ser Arg Leu Phe Asp Asn Ala Met Leu Arg  
 1 5 10 15  
 Ala His Arg Leu His Gln Leu Ala Phe Asp Thr Tyr Gln Glu Phe Glu  
 20 25 30  
 Glu Ala Tyr Ile Pro Lys Glu Gln Lys Tyr Ser Phe Leu Gln Asn Pro  
 35 40 45  
 Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile Pro Thr Pro Ser Asn Arg  
 50 55 60  
 Glu Glu Thr Gln Gln Lys Ser Asn Leu Glu Leu Arg Ile Ser Leu  
 65 70 75 80  
 Leu Leu Ile Gln Ser Trp Leu Glu Pro Val Gln Phe Leu Arg Ser Val  
 85 90 95  
 Phe Ala Asn Ser Ile Val Tyr Gly Ala Ser Asp Ser Asn Val Tyr Asp  
 100 105 110  
 Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln Thr Leu Met Gly Arg Leu  
 115 120 125  
 Glu Asp Gly Ser Pro Arg Thr Gly Gln Ile Phe Lys Gln Thr Tyr Ser  
 130 135 140  
 Lys Phe Asp Thr Asn Ser His Asn Asp Asp Ala Leu Leu Lys Asn Tyr  
 145 150 155 160  
 Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met Asp Lys Val Glu Thr Phe  
 165 170 175  
 Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe  
 180 185 190

<210> 872  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 872  
 Phe Pro Thr Ile Pro Leu Ser Arg Leu Phe Asp Asn Ala Met Leu Arg  
 1 5 10 15  
 Ala His Arg Leu His Gln Leu Ala Phe Asp Thr Tyr Gln Glu Phe Glu  
 20 25 30  
 Glu Ala Tyr Ile Pro Lys Glu Gln Lys Tyr Ser Phe Leu Gln Asn Pro  
 35 40 45  
 Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile Pro Thr Pro Ser Asn Arg  
 50 55 60  
 Glu Glu Thr Gln Gln Lys Ser Asn Leu Glu Leu Arg Ile Ser Leu  
 65 70 75 80  
 Leu Leu Ile Gln Ser Trp Leu Glu Pro Val Gln Phe Leu Arg Ser Val  
 85 90 95  
 Phe Ala Asn Ser Leu Val Tyr Gly Ala Ser Asp Ser Asn Val Tyr Asp  
 100 105 110  
 Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln Thr Leu Met Gly Arg Leu  
 115 120 125  
 Gln Asp Gly Ser Pro Arg Thr Gly Gln Ile Phe Lys Gln Thr Tyr Ser  
 130 135 140  
 Lys Phe Asp Thr Asn Ser His Asn Asp Asp Ala Leu Leu Lys Asn Tyr  
 145 150 155 160  
 Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met Asp Lys Val Glu Thr Phe

165                      170  
 Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe  
                     180                      185                      190

<210> 873  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 873  
 Phe Pro Thr Ile Pro Leu Ser Arg Leu Phe Asp Asn Ala Met Leu Arg  
   1                    5                    10                    15  
 Ala His Arg Leu His Gln Leu Ala Phe Asp Thr Tyr Gln Glu Phe Glu  
                     20                    25                    30  
 Glu Ala Tyr Ile Pro Lys Glu Gln Lys Tyr Ser Phe Leu Gln Asn Pro  
                     35                    40                    45  
 Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile Pro Thr Pro Ser Asn Arg  
                     50                    55                    60  
 Glu Glu Thr Gln Gln Lys Ser Asn Leu Glu Leu Arg Ile Ser Leu  
   65                    70                    75                    80  
 Leu Leu Ile Gln Ser Trp Leu Glu Pro Val Gln Phe Leu Arg Ser Val  
                     85                    90                    95  
 Phe Ala Asn Ser Leu Val Tyr Gly Ala Ser Asp Ser Asn Val Tyr Asp  
                     100                    105                    110  
 Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln Thr Leu Met Gly Arg Leu  
                     115                    120                    125  
 Asn Asp Gly Ser Pro Arg Thr Gly Gln Ile Phe Lys Gln Thr Tyr Ser  
                     130                    135                    140  
 Lys Phe Asp Thr Asn Ser His Asn Asp Asp Ala Leu Leu Lys Asn Tyr  
   145                    150                    155                    160  
 Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met Asp Lys Val Glu Thr Phe  
                     165                    170                    175  
 Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe  
                     180                    185                    190

<210> 874  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 874  
 Phe Pro Thr Ile Pro Leu Ser Arg Leu Phe Asp Asn Ala Met Leu Arg  
   1                    5                    10                    15  
 Ala His Arg Leu His Gln Leu Ala Phe Asp Thr Tyr Gln Glu Phe Glu  
                     20                    25                    30  
 Glu Ala Tyr Ile Pro Lys Glu Gln Lys Tyr Ser Phe Leu Gln Asn Pro  
                     35                    40                    45  
 Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile Pro Thr Pro Ser Asn Arg  
                     50                    55                    60  
 Glu Glu Thr Gln Gln Lys Ser Asn Leu Glu Leu Arg Ile Ser Leu  
   65                    70                    75                    80  
 Leu Leu Ile Gln Ser Trp Leu Glu Pro Val Gln Phe Leu Arg Ser Val  
                     85                    90                    95  
 Phe Ala Asn Ser Leu Val Tyr Gly Ala Ser Asp Ser Asn Val Tyr Asp  
                     100                    105                    110  
 Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln Thr Leu Met Gly Arg Leu  
                     115                    120                    125  
 His Asp Gly Ser Pro Arg Thr Gly Gln Ile Phe Lys Gln Thr Tyr Ser  
                     130                    135                    140  
 Lys Phe Asp Thr Asn Ser His Asn Asp Asp Ala Leu Leu Lys Asn Tyr  
   145                    150                    155                    160  
 Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met Asp Lys Val Glu Thr Phe  
                     165                    170                    175

Leu Arg Ile Val Gln Arg Ser Val Glu Gly Ser Cys Gly  
 180 185 190

<210> 875  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 875  
 Phe Pro Thr Ile Pro Leu Ser Arg Leu Phe Asp Asn Ala Met Leu Arg  
 1 5 10 15  
 Ala His Arg Leu His Gln Leu Ala Phe Asp Thr Tyr Gln Glu Phe Glu  
 20 25 30  
 Glu Ala Tyr Ile Pro Lys Glu Gln Lys Tyr Ser Phe Leu Gln Asn Pro  
 35 40 45  
 Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile Pro Thr Pro Ser Asn Arg  
 50 55 60  
 Glu Glu Thr Gln Gln Lys Ser Asn Leu Glu Leu Leu Arg Ile Ser Leu  
 65 70 75 80  
 Leu Leu Ile Gln Ser Trp Leu Glu Pro Val Gln Phe Leu Arg Ser Val  
 85 90 95  
 Phe Ala Asn Ser Leu Val Tyr Gly Ala Ser Asp Ser Asn Val Tyr Asp  
 100 105 110  
 Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln Thr Leu Met Gly Arg Leu  
 115 120 125  
 Glu Gln Gly Ser Pro Arg Thr Gly Gln Ile Phe Lys Gln Thr Tyr Ser  
 130 135 140  
 Lys Phe Asp Thr Asn Ser His Asn Asp Asp Ala Leu Leu Lys Asn Tyr  
 145 150 155 160  
 Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met Asp Lys Val Glu Thr Phe  
 165 170 175  
 Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe  
 180 185 190

<210> 876  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 876  
 Phe Pro Thr Ile Pro Leu Ser Arg Leu Phe Asp Asn Ala Met Leu Arg  
 1 5 10 15  
 Ala His Arg Leu His Gln Leu Ala Phe Asp Thr Tyr Gln Glu Phe Glu  
 20 25 30  
 Glu Ala Tyr Ile Pro Lys Glu Gln Lys Tyr Ser Phe Leu Gln Asn Pro  
 35 40 45  
 Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile Pro Thr Pro Ser Asn Arg  
 50 55 60  
 Glu Glu Thr Gln Gln Lys Ser Asn Leu Glu Leu Leu Arg Ile Ser Leu  
 65 70 75 80  
 Leu Leu Ile Gln Ser Trp Leu Glu Pro Val Gln Phe Leu Arg Ser Val  
 85 90 95  
 Phe Ala Asn Ser Leu Val Tyr Gly Ala Ser Asp Ser Asn Val Tyr Asp  
 100 105 110  
 Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln Thr Leu Met Gly Arg Leu  
 115 120 125  
 Glu Asn Gly Ser Pro Arg Thr Gly Gln Ile Phe Lys Gln Thr Tyr Ser  
 130 135 140  
 Lys Phe Asp Thr Asn Ser His Asn Asp Asp Ala Leu Leu Lys Asn Tyr  
 145 150 155 160  
 Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met Asp Lys Val Glu Thr Phe  
 165 170 175  
 Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe

<210> 877  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 877  
 Phe Pro Thr Ile Pro Leu Ser Arg Leu Phe Asp Asn Ala Met Leu Arg  
 1 5 10 15  
 Ala His Arg Leu His Gln Leu Ala Phe Asp Thr Tyr Gln Glu Phe Glu  
 20 25 30  
 Glu Ala Tyr Ile Pro Lys Glu Gln Lys Tyr Ser Phe Leu Gln Asn Pro  
 35 40 45  
 Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile Pro Thr Pro Ser Asn Arg  
 50 55 60  
 Glu Glu Thr Gln Gln Lys Ser Asn Leu Glu Leu Leu Arg Ile Ser Leu  
 65 70 75 80  
 Leu Leu Ile Gln Ser Trp Leu Glu Pro Val Gln Phe Leu Arg Ser Val  
 85 90 95  
 Phe Ala Asn Ser Leu Val Tyr Gly Ala Ser Asp Ser Asn Val Tyr Asp  
 100 105 110  
 Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln Thr Leu Met Gly Arg Leu  
 115 120 125  
 Glu Asp Gly Ser Ser Arg Thr Gly Gln Ile Phe Lys Gln Thr Tyr Ser  
 130 135 140  
 Lys Phe Asp Thr Asn Ser His Asn Asp Asp Ala Leu Leu Lys Asn Tyr  
 145 150 155 160  
 Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met Asp Lys Val Glu Thr Phe  
 165 170 175  
 Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe  
 180 185 190

<210> 878  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 878  
 Phe Pro Thr Ile Pro Leu Ser Arg Leu Phe Asp Asn Ala Met Leu Arg  
 1 5 10 15  
 Ala His Arg Leu His Gln Leu Ala Phe Asp Thr Tyr Gln Glu Phe Glu  
 20 25 30  
 Glu Ala Tyr Ile Pro Lys Glu Gln Lys Tyr Ser Phe Leu Gln Asn Pro  
 35 40 45  
 Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile Pro Thr Pro Ser Asn Arg  
 50 55 60  
 Glu Glu Thr Gln Gln Lys Ser Asn Leu Glu Leu Leu Arg Ile Ser Leu  
 65 70 75 80  
 Leu Leu Ile Gln Ser Trp Leu Glu Pro Val Gln Phe Leu Arg Ser Val  
 85 90 95  
 Phe Ala Asn Ser Leu Val Tyr Gly Ala Ser Asp Ser Asn Val Tyr Asp  
 100 105 110  
 Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln Thr Leu Met Gly Arg Leu  
 115 120 125  
 Glu Asp Gly Ser Ala Arg Thr Gly Gln Ile Phe Lys Gln Thr Tyr Ser  
 130 135 140  
 Lys Phe Asp Thr Asn Ser His Asn Asp Asp Ala Leu Leu Lys Asn Tyr  
 145 150 155 160  
 Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met Asp Lys Val Glu Thr Phe  
 165 170 175  
 Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe  
 180 185 190

<210> 879  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 879

Phe	Pro	Thr	Ile	Pro	Leu	Ser	Arg	Leu	Phe	Asp	Asn	Ala	Met	Leu	Arg
1				5					10					15	
Ala	His	Arg	Leu	His	Gln	Leu	Ala	Phe	Asp	Thr	Tyr	Gln	Glu	Phe	Glu
			20				25						30		
Glu	Ala	Tyr	Ile	Pro	Lys	Glu	Gln	Lys	Tyr	Ser	Phe	Leu	Gln	Asn	Pro
			35				40					45			
Gln	Thr	Ser	Leu	Cys	Phe	Ser	Glu	Ser	Ile	Pro	Thr	Pro	Ser	Asn	Arg
			50				55				60				
Glu	Glu	Thr	Gln	Gln	Lys	Ser	Asn	Leu	Glu	Leu	Leu	Arg	Ile	Ser	Leu
65					70				75					80	
Leu	Leu	Ile	Gln	Ser	Trp	Leu	Glu	Pro	Val	Gln	Phe	Leu	Arg	Ser	Val
				85				90						95	
Phe	Ala	Asn	Ser	Leu	Val	Tyr	Gly	Ala	Ser	Asp	Ser	Asn	Val	Tyr	Asp
			100					105					110		
Leu	Leu	Lys	Asp	Leu	Glu	Glu	Gly	Ile	Gln	Thr	Leu	Met	Gly	Arg	Leu
			115				120					125			
Glu	Asp	Gly	Ser	Pro	His	Thr	Gly	Gln	Ile	Phe	Lys	Gln	Thr	Tyr	Ser
			130			135					140				
Lys	Phe	Asp	Thr	Asn	Ser	His	Asn	Asp	Asp	Ala	Leu	Leu	Lys	Asn	Tyr
145				150						155				160	
Gly	Leu	Leu	Tyr	Cys	Phe	Arg	Lys	Asp	Met	Asp	Lys	Val	Glu	Thr	Phe
				165				170						175	
Leu	Arg	Ile	Val	Gln	Cys	Arg	Ser	Val	Glu	Gly	Ser	Cys	Gly	Phe	
			180					185					190		

<210> 880  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 880

Phe	Pro	Thr	Ile	Pro	Leu	Ser	Arg	Leu	Phe	Asp	Asn	Ala	Met	Leu	Arg
1				5					10					15	
Ala	His	Arg	Leu	His	Gln	Leu	Ala	Phe	Asp	Thr	Tyr	Gln	Glu	Phe	Glu
			20				25						30		
Glu	Ala	Tyr	Ile	Pro	Lys	Glu	Gln	Lys	Tyr	Ser	Phe	Leu	Gln	Asn	Pro
			35				40					45			
Gln	Thr	Ser	Leu	Cys	Phe	Ser	Glu	Ser	Ile	Pro	Thr	Pro	Ser	Asn	Arg
			50				55				60				
Glu	Glu	Thr	Gln	Gln	Lys	Ser	Asn	Leu	Glu	Leu	Leu	Arg	Ile	Ser	Leu
65					70				75					80	
Leu	Leu	Ile	Gln	Ser	Trp	Leu	Glu	Pro	Val	Gln	Phe	Leu	Arg	Ser	Val
				85				90						95	
Phe	Ala	Asn	Ser	Leu	Val	Tyr	Gly	Ala	Ser	Asp	Ser	Asn	Val	Tyr	Asp
			100					105					110		
Leu	Leu	Lys	Asp	Leu	Glu	Glu	Gly	Ile	Gln	Thr	Leu	Met	Gly	Arg	Leu
			115				120					125			
Glu	Asp	Gly	Ser	Pro	Gln	Thr	Gly	Gln	Ile	Phe	Lys	Gln	Thr	Tyr	Ser
			130			135					140				
Lys	Phe	Asp	Thr	Asn	Ser	His	Asn	Asp	Asp	Ala	Leu	Leu	Lys	Asn	Tyr
145				150						155				160	
Gly	Leu	Leu	Tyr	Cys	Phe	Arg	Lys	Asp	Met	Asp	Lys	Val	Glu	Thr	Phe
				165				170						175	
Leu	Arg	Ile	Val	Gln	Cys	Arg	Ser	Val	Glu	Gly	Ser	Cys	Gly	Phe	
			180					185					190		

<210> 881  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 881  
 Phe Pro Thr Ile Pro Leu Ser Arg Leu Phe Asp Asn Ala Met Leu Arg  
 1 5 10 15  
 Ala His Arg Leu His Gln Leu Ala Phe Asp Thr Tyr Gln Glu Phe Glu  
 20 25 30  
 Glu Ala Tyr Ile Pro Lys Glu Gln Lys Tyr Ser Phe Leu Gln Asn Pro  
 35 40 45  
 Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile Pro Thr Pro Ser Asn Arg  
 50 55 60  
 Glu Glu Thr Gln Gln Lys Ser Asn Leu Glu Leu Leu Arg Ile Ser Leu  
 65 70 75 80  
 Leu Leu Ile Gln Ser Trp Leu Glu Pro Val Gln Phe Leu Arg Ser Val  
 85 90 95  
 Phe Ala Asn Ser Leu Val Tyr Gly Ala Ser Asp Ser Asn Val Tyr Asp  
 100 105 110  
 Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln Thr Leu Met Gly Arg Leu  
 115 120 125  
 Glu Asp Gly Ser Pro Arg Thr Gly Gln Ile Phe Gln Gln Thr Tyr Ser  
 130 135 140  
 Lys Phe Asp Thr Asn Ser His Asn Asp Asp Ala Leu Leu Lys Asn Tyr  
 145 150 155 160  
 Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met Asp Lys Val Glu Thr Phe  
 165 170 175  
 Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe  
 180 185 190

<210> 882  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 882  
 Phe Pro Thr Ile Pro Leu Ser Arg Leu Phe Asp Asn Ala Met Leu Arg  
 1 5 10 15  
 Ala His Arg Leu His Gln Leu Ala Phe Asp Thr Tyr Gln Glu Phe Glu  
 20 25 30  
 Glu Ala Tyr Ile Pro Lys Glu Gln Lys Tyr Ser Phe Leu Gln Asn Pro  
 35 40 45  
 Gln Thr Ser Leu Cys Phe Ser Glu Ser Ile Pro Thr Pro Ser Asn Arg  
 50 55 60  
 Glu Glu Thr Gln Gln Lys Ser Asn Leu Glu Leu Leu Arg Ile Ser Leu  
 65 70 75 80  
 Leu Leu Ile Gln Ser Trp Leu Glu Pro Val Gln Phe Leu Arg Ser Val  
 85 90 95  
 Phe Ala Asn Ser Leu Val Tyr Gly Ala Ser Asp Ser Asn Val Tyr Asp  
 100 105 110  
 Leu Leu Lys Asp Leu Glu Glu Gly Ile Gln Thr Leu Met Gly Arg Leu  
 115 120 125  
 Glu Asp Gly Ser Pro Arg Thr Gly Gln Ile Phe Asn Gln Thr Tyr Ser  
 130 135 140  
 Lys Phe Asp Thr Asn Ser His Asn Asp Asp Ala Leu Leu Lys Asn Tyr  
 145 150 155 160  
 Gly Leu Leu Tyr Cys Phe Arg Lys Asp Met Asp Lys Val Glu Thr Phe  
 165 170 175  
 Leu Arg Ile Val Gln Cys Arg Ser Val Glu Gly Ser Cys Gly Phe  
 180 185 190

<210> 883

<211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 883

Phe	Pro	Thr	Ile	Pro	Leu	Ser	Arg	Leu	Phe	Asp	Asn	Ala	Met	Leu	Arg
1				5					10					15	
Ala	His	Arg	Leu	His	Gln	Leu	Ala	Phe	Asp	Thr	Tyr	Gln	Glu	Phe	Glu
			20					25					30		
Glu	Ala	Tyr	Ile	Pro	Lys	Glu	Gln	Lys	Tyr	Ser	Phe	Leu	Gln	Asn	Pro
		35				40						45			
Gln	Thr	Ser	Leu	Cys	Phe	Ser	Glu	Ser	Ile	Pro	Thr	Pro	Ser	Asn	Arg
	50					55					60				
Glu	Glu	Thr	Gln	Gln	Lys	Ser	Asn	Leu	Glu	Leu	Leu	Arg	Ile	Ser	Leu
65					70					75					80
Leu	Leu	Ile	Gln	Ser	Trp	Leu	Glu	Pro	Val	Gln	Phe	Leu	Arg	Ser	Val
				85					90					95	
Phe	Ala	Asn	Ser	Leu	Val	Tyr	Gly	Ala	Ser	Asp	Ser	Asn	Val	Tyr	Asp
			100					105					110		
Leu	Leu	Lys	Asp	Leu	Glu	Glu	Gly	Ile	Gln	Thr	Leu	Met	Gly	Arg	Leu
		115					120					125			
Glu	Asp	Gly	Ser	Pro	Arg	Thr	Gly	Gln	Ile	Phe	Lys	Gln	Thr	His	Ser
	130					135					140				
Lys	Phe	Asp	Thr	Asn	Ser	His	Asn	Asp	Asp	Ala	Leu	Leu	Lys	Asn	Tyr
145					150					155					160
Gly	Leu	Leu	Tyr	Cys	Phe	Arg	Lys	Asp	Met	Asp	Lys	Val	Glu	Thr	Phe
				165					170					175	
Leu	Arg	Ile	Val	Gln	Cys	Arg	Ser	Val	Glu	Gly	Ser	Cys	Gly	Phe	
			180					185					190		

<210> 884  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 884

Phe	Pro	Thr	Ile	Pro	Leu	Ser	Arg	Leu	Phe	Asp	Asn	Ala	Met	Leu	Arg
1				5					10					15	
Ala	His	Arg	Leu	His	Gln	Leu	Ala	Phe	Asp	Thr	Tyr	Gln	Glu	Phe	Glu
			20					25					30		
Glu	Ala	Tyr	Ile	Pro	Lys	Glu	Gln	Lys	Tyr	Ser	Phe	Leu	Gln	Asn	Pro
		35				40						45			
Gln	Thr	Ser	Leu	Cys	Phe	Ser	Glu	Ser	Ile	Pro	Thr	Pro	Ser	Asn	Arg
	50					55					60				
Glu	Glu	Thr	Gln	Gln	Lys	Ser	Asn	Leu	Glu	Leu	Leu	Arg	Ile	Ser	Leu
65					70					75					80
Leu	Leu	Ile	Gln	Ser	Trp	Leu	Glu	Pro	Val	Gln	Phe	Leu	Arg	Ser	Val
				85					90					95	
Phe	Ala	Asn	Ser	Leu	Val	Tyr	Gly	Ala	Ser	Asp	Ser	Asn	Val	Tyr	Asp
			100					105					110		
Leu	Leu	Lys	Asp	Leu	Glu	Glu	Gly	Ile	Gln	Thr	Leu	Met	Gly	Arg	Leu
		115					120					125			
Glu	Asp	Gly	Ser	Pro	Arg	Thr	Gly	Gln	Ile	Phe	Lys	Gln	Thr	Ile	Ser
	130					135					140				
Lys	Phe	Asp	Thr	Asn	Ser	His	Asn	Asp	Asp	Ala	Leu	Leu	Lys	Asn	Tyr
145					150					155					160
Gly	Leu	Leu	Tyr	Cys	Phe	Arg	Lys	Asp	Met	Asp	Lys	Val	Glu	Thr	Phe
				165					170					175	
Leu	Arg	Ile	Val	Gln	Cys	Arg	Ser	Val	Glu	Gly	Ser	Cys	Gly	Phe	
			180					185					190		

<210> 885  
 <211> 191



<212> PRT  
<213> Homo sapiens

<400> 885

Phe	Pro	Thr	Ile	Pro	Leu	Ser	Arg	Leu	Phe	Asp	Asn	Ala	Met	Leu	Arg
1				5					10					15	
Ala	His	Arg	Leu	His	Gln	Leu	Ala	Phe	Asp	Thr	Tyr	Gln	Glu	Phe	Glu
			20					25					30		
Glu	Ala	Tyr	Ile	Pro	Lys	Glu	Gln	Lys	Tyr	Ser	Phe	Leu	Gln	Asn	Pro
		35				40						45			
Gln	Thr	Ser	Leu	Cys	Phe	Ser	Glu	Ser	Ile	Pro	Thr	Pro	Ser	Asn	Arg
	50					55					60				
Glu	Glu	Thr	Gln	Gln	Lys	Ser	Asn	Leu	Glu	Leu	Leu	Arg	Ile	Ser	Leu
65					70					75					80
Leu	Leu	Ile	Gln	Ser	Trp	Leu	Glu	Pro	Val	Gln	Phe	Leu	Arg	Ser	Val
			85						90					95	
Phe	Ala	Asn	Ser	Leu	Val	Tyr	Gly	Ala	Ser	Asp	Ser	Asn	Val	Tyr	Asp
			100					105					110		
Leu	Leu	Lys	Asp	Leu	Glu	Glu	Gly	Ile	Gln	Thr	Leu	Met	Gly	Arg	Leu
		115					120					125			
Glu	Asp	Gly	Ser	Pro	Arg	Thr	Gly	Gln	Ile	Phe	Lys	Gln	Thr	Tyr	Ser
	130					135					140				
Gln	Phe	Asp	Thr	Asn	Ser	His	Asn	Asp	Asp	Ala	Leu	Leu	Lys	Asn	Tyr
145					150					155					160
Gly	Leu	Leu	Tyr	Cys	Phe	Arg	Lys	Asp	Met	Asp	Lys	Val	Glu	Thr	Phe
				165					170					175	
Leu	Arg	Ile	Val	Gln	Cys	Arg	Ser	Val	Glu	Gly	Ser	Cys	Gly	Phe	
			180					185					190		

<210> 886

<211> 191

<212> PRT

<213> Homo sapiens

<400> 886

Phe	Pro	Thr	Ile	Pro	Leu	Ser	Arg	Leu	Phe	Asp	Asn	Ala	Met	Leu	Arg
1				5					10					15	
Ala	His	Arg	Leu	His	Gln	Leu	Ala	Phe	Asp	Thr	Tyr	Gln	Glu	Phe	Glu
			20					25					30		
Glu	Ala	Tyr	Ile	Pro	Lys	Glu	Gln	Lys	Tyr	Ser	Phe	Leu	Gln	Asn	Pro
		35				40						45			
Gln	Thr	Ser	Leu	Cys	Phe	Ser	Glu	Ser	Ile	Pro	Thr	Pro	Ser	Asn	Arg
	50					55					60				
Glu	Glu	Thr	Gln	Gln	Lys	Ser	Asn	Leu	Glu	Leu	Leu	Arg	Ile	Ser	Leu
65					70					75					80
Leu	Leu	Ile	Gln	Ser	Trp	Leu	Glu	Pro	Val	Gln	Phe	Leu	Arg	Ser	Val
			85						90					95	
Phe	Ala	Asn	Ser	Leu	Val	Tyr	Gly	Ala	Ser	Asp	Ser	Asn	Val	Tyr	Asp
			100					105					110		
Leu	Leu	Lys	Asp	Leu	Glu	Glu	Gly	Ile	Gln	Thr	Leu	Met	Gly	Arg	Leu
		115					120					125			
Glu	Asp	Gly	Ser	Pro	Arg	Thr	Gly	Gln	Ile	Phe	Lys	Gln	Thr	Tyr	Ser
	130					135					140				
Asn	Phe	Asp	Thr	Asn	Ser	His	Asn	Asp	Asp	Ala	Leu	Leu	Lys	Asn	Tyr
145					150					155					160
Gly	Leu	Leu	Tyr	Cys	Phe	Arg	Lys	Asp	Met	Asp	Lys	Val	Glu	Thr	Phe
				165					170					175	
Leu	Arg	Ile	Val	Gln	Cys	Arg	Ser	Val	Glu	Gly	Ser	Cys	Gly	Phe	
			180					185					190		

<210> 887

<211> 191

<212> PRT

<213> Homo sapiens

<400> 887

Phe	Pro	Thr	Ile	Pro	Leu	Ser	Arg	Leu	Phe	Asp	Asn	Ala	Met	Leu	Arg
1				5					10					15	
Ala	His	Arg	Leu	His	Gln	Leu	Ala	Phe	Asp	Thr	Tyr	Gln	Glu	Phe	Glu
			20					25					30		
Glu	Ala	Tyr	Ile	Pro	Lys	Glu	Gln	Lys	Tyr	Ser	Phe	Leu	Gln	Asn	Pro
		35					40					45			
Gln	Thr	Ser	Leu	Cys	Phe	Ser	Glu	Ser	Ile	Pro	Thr	Pro	Ser	Asn	Arg
	50					55				60					
Glu	Glu	Thr	Gln	Gln	Lys	Ser	Asn	Leu	Glu	Leu	Leu	Arg	Ile	Ser	Leu
65					70				75					80	
Leu	Leu	Ile	Gln	Ser	Trp	Leu	Glu	Pro	Val	Gln	Phe	Leu	Arg	Ser	Val
			85						90					95	
Phe	Ala	Asn	Ser	Leu	Val	Tyr	Gly	Ala	Ser	Asp	Ser	Asn	Val	Tyr	Asp
			100					105					110		
Leu	Leu	Lys	Asp	Leu	Glu	Glu	Gly	Ile	Gln	Thr	Leu	Met	Gly	Arg	Leu
		115					120					125			
Glu	Asp	Gly	Ser	Pro	Arg	Thr	Gly	Gln	Ile	Phe	Lys	Gln	Thr	Tyr	Ser
	130					135				140					
Lys	Ile	Asp	Thr	Asn	Ser	His	Asn	Asp	Asp	Ala	Leu	Leu	Lys	Asn	Tyr
145					150					155				160	
Gly	Leu	Leu	Tyr	Cys	Phe	Arg	Lys	Asp	Met	Asp	Lys	Val	Glu	Thr	Phe
				165					170					175	
Leu	Arg	Ile	Val	Gln	Cys	Arg	Ser	Val	Glu	Gly	Ser	Cys	Gly	Phe	
			180					185					190		

<210> 888

<211> 191

<212> PRT

<213> Homo sapiens

<400> 888

Phe	Pro	Thr	Ile	Pro	Leu	Ser	Arg	Leu	Phe	Asp	Asn	Ala	Met	Leu	Arg
1				5					10					15	
Ala	His	Arg	Leu	His	Gln	Leu	Ala	Phe	Asp	Thr	Tyr	Gln	Glu	Phe	Glu
			20					25					30		
Glu	Ala	Tyr	Ile	Pro	Lys	Glu	Gln	Lys	Tyr	Ser	Phe	Leu	Gln	Asn	Pro
		35					40					45			
Gln	Thr	Ser	Leu	Cys	Phe	Ser	Glu	Ser	Ile	Pro	Thr	Pro	Ser	Asn	Arg
	50					55				60					
Glu	Glu	Thr	Gln	Gln	Lys	Ser	Asn	Leu	Glu	Leu	Leu	Arg	Ile	Ser	Leu
65					70				75					80	
Leu	Leu	Ile	Gln	Ser	Trp	Leu	Glu	Pro	Val	Gln	Phe	Leu	Arg	Ser	Val
			85						90					95	
Phe	Ala	Asn	Ser	Leu	Val	Tyr	Gly	Ala	Ser	Asp	Ser	Asn	Val	Tyr	Asp
			100					105					110		
Leu	Leu	Lys	Asp	Leu	Glu	Glu	Gly	Ile	Gln	Thr	Leu	Met	Gly	Arg	Leu
		115					120					125			
Glu	Asp	Gly	Ser	Pro	Arg	Thr	Gly	Gln	Ile	Phe	Lys	Gln	Thr	Tyr	Ser
	130					135				140					
Lys	Val	Asp	Thr	Asn	Ser	His	Asn	Asp	Asp	Ala	Leu	Leu	Lys	Asn	Tyr
145					150					155				160	
Gly	Leu	Leu	Tyr	Cys	Phe	Arg	Lys	Asp	Met	Asp	Lys	Val	Glu	Thr	Phe
				165					170					175	
Leu	Arg	Ile	Val	Gln	Cys	Arg	Ser	Val	Glu	Gly	Ser	Cys	Gly	Phe	
			180					185					190		

<210> 889

<211> 191

<212> PRT

<213> Homo sapiens

<400> 889

Phe	Pro	Thr	Ile	Pro	Leu	Ser	Arg	Leu	Phe	Asp	Asn	Ala	Met	Leu	Arg
1				5					10					15	
Ala	His	Arg	Leu	His	Gln	Leu	Ala	Phe	Asp	Thr	Tyr	Gln	Glu	Phe	Glu
			20					25					30		
Glu	Ala	Tyr	Ile	Pro	Lys	Glu	Gln	Lys	Tyr	Ser	Phe	Leu	Gln	Asn	Pro
		35				40						45			
Gln	Thr	Ser	Leu	Cys	Phe	Ser	Glu	Ser	Ile	Pro	Thr	Pro	Ser	Asn	Arg
	50					55					60				
Glu	Glu	Thr	Gln	Gln	Lys	Ser	Asn	Leu	Glu	Leu	Leu	Arg	Ile	Ser	Leu
65					70				75					80	
Leu	Leu	Ile	Gln	Ser	Trp	Leu	Glu	Pro	Val	Gln	Phe	Leu	Arg	Ser	Val
			85					90						95	
Phe	Ala	Asn	Ser	Leu	Val	Tyr	Gly	Ala	Ser	Asp	Ser	Asn	Val	Tyr	Asp
			100					105						110	
Leu	Leu	Lys	Asp	Leu	Glu	Glu	Gly	Ile	Gln	Thr	Leu	Met	Gly	Arg	Leu
		115					120						125		
Glu	Asp	Gly	Ser	Pro	Arg	Thr	Gly	Gln	Ile	Phe	Lys	Gln	Thr	Tyr	Ser
	130					135					140				
Lys	Phe	Gln	Thr	Asn	Ser	His	Asn	Asp	Asp	Ala	Leu	Leu	Lys	Asn	Tyr
145					150					155					160
Gly	Leu	Leu	Tyr	Cys	Phe	Arg	Lys	Asp	Met	Asp	Lys	Val	Glu	Thr	Phe
				165					170					175	
Leu	Arg	Ile	Val	Gln	Cys	Arg	Ser	Val	Glu	Gly	Ser	Cys	Gly	Phe	
			180					185						190	

<210> 890

<211> 191

<212> PRT

<213> Homo sapiens

<400> 890

Phe	Pro	Thr	Ile	Pro	Leu	Ser	Arg	Leu	Phe	Asp	Asn	Ala	Met	Leu	Arg
1				5					10					15	
Ala	His	Arg	Leu	His	Gln	Leu	Ala	Phe	Asp	Thr	Tyr	Gln	Glu	Phe	Glu
			20					25					30		
Glu	Ala	Tyr	Ile	Pro	Lys	Glu	Gln	Lys	Tyr	Ser	Phe	Leu	Gln	Asn	Pro
		35				40						45			
Gln	Thr	Ser	Leu	Cys	Phe	Ser	Glu	Ser	Ile	Pro	Thr	Pro	Ser	Asn	Arg
	50					55					60				
Glu	Glu	Thr	Gln	Gln	Lys	Ser	Asn	Leu	Glu	Leu	Leu	Arg	Ile	Ser	Leu
65					70				75					80	
Leu	Leu	Ile	Gln	Ser	Trp	Leu	Glu	Pro	Val	Gln	Phe	Leu	Arg	Ser	Val
			85					90						95	
Phe	Ala	Asn	Ser	Leu	Val	Tyr	Gly	Ala	Ser	Asp	Ser	Asn	Val	Tyr	Asp
			100					105						110	
Leu	Leu	Lys	Asp	Leu	Glu	Glu	Gly	Ile	Gln	Thr	Leu	Met	Gly	Arg	Leu
		115					120						125		
Glu	Asp	Gly	Ser	Pro	Arg	Thr	Gly	Gln	Ile	Phe	Lys	Gln	Thr	Tyr	Ser
	130					135					140				
Lys	Phe	Asn	Thr	Asn	Ser	His	Asn	Asp	Asp	Ala	Leu	Leu	Lys	Asn	Tyr
145					150					155					160
Gly	Leu	Leu	Tyr	Cys	Phe	Arg	Lys	Asp	Met	Asp	Lys	Val	Glu	Thr	Phe
				165					170					175	
Leu	Arg	Ile	Val	Gln	Cys	Arg	Ser	Val	Glu	Gly	Ser	Cys	Gly	Phe	
			180					185						190	

<210> 891

<211> 191

<212> PRT

<213> Homo sapiens

<400> 891

Phe	Pro	Thr	Ile	Pro	Leu	Ser	Arg	Leu	Phe	Asp	Asn	Ala	Met	Leu	Arg
1				5					10					15	
Ala	His	Arg	Leu	His	Gln	Leu	Ala	Phe	Asp	Thr	Tyr	Gln	Glu	Phe	Glu
			20					25					30		
Glu	Ala	Tyr	Ile	Pro	Lys	Glu	Gln	Lys	Tyr	Ser	Phe	Leu	Gln	Asn	Pro
		35				40						45			
Gln	Thr	Ser	Leu	Cys	Phe	Ser	Glu	Ser	Ile	Pro	Thr	Pro	Ser	Asn	Arg
	50					55				60					
Glu	Glu	Thr	Gln	Gln	Lys	Ser	Asn	Leu	Glu	Leu	Leu	Arg	Ile	Ser	Leu
65					70				75					80	
Leu	Leu	Ile	Gln	Ser	Trp	Leu	Glu	Pro	Val	Gln	Phe	Leu	Arg	Ser	Val
			85					90						95	
Phe	Ala	Asn	Ser	Leu	Val	Tyr	Gly	Ala	Ser	Asp	Ser	Asn	Val	Tyr	Asp
		100						105					110		
Leu	Leu	Lys	Asp	Leu	Glu	Glu	Gly	Ile	Gln	Thr	Leu	Met	Gly	Arg	Leu
		115					120					125			
Glu	Asp	Gly	Ser	Pro	Arg	Thr	Gly	Gln	Ile	Phe	Lys	Gln	Thr	Tyr	Ser
	130					135					140				
Lys	Phe	Asp	Thr	Asn	Ser	His	Asn	Asp	Asp	Ala	Leu	Leu	Lys	Asn	Tyr
145				150						155				160	
Gly	Leu	Leu	Tyr	Cys	Phe	Arg	Lys	Asp	Met	Asp	Lys	Val	Glu	Thr	Phe
			165					170						175	
Leu	Arg	Ile	Val	Gln	Cys	His	Ser	Val	Glu	Gly	Ser	Cys	Gly	Phe	
		180						185					190		

<210> 892

<211> 191

<212> PRT

<213> Homo sapiens

<400> 892

Phe	Pro	Thr	Ile	Pro	Leu	Ser	Arg	Leu	Phe	Asp	Asn	Ala	Met	Leu	Arg
1				5					10					15	
Ala	His	Arg	Leu	His	Gln	Leu	Ala	Phe	Asp	Thr	Tyr	Gln	Glu	Phe	Glu
			20					25					30		
Glu	Ala	Tyr	Ile	Pro	Lys	Glu	Gln	Lys	Tyr	Ser	Phe	Leu	Gln	Asn	Pro
		35				40						45			
Gln	Thr	Ser	Leu	Cys	Phe	Ser	Glu	Ser	Ile	Pro	Thr	Pro	Ser	Asn	Arg
	50					55				60					
Glu	Glu	Thr	Gln	Gln	Lys	Ser	Asn	Leu	Glu	Leu	Leu	Arg	Ile	Ser	Leu
65					70				75					80	
Leu	Leu	Ile	Gln	Ser	Trp	Leu	Glu	Pro	Val	Gln	Phe	Leu	Arg	Ser	Val
			85					90						95	
Phe	Ala	Asn	Ser	Leu	Val	Tyr	Gly	Ala	Ser	Asp	Ser	Asn	Val	Tyr	Asp
		100						105					110		
Leu	Leu	Lys	Asp	Leu	Glu	Glu	Gly	Ile	Gln	Thr	Leu	Met	Gly	Arg	Leu
		115					120					125			
Glu	Asp	Gly	Ser	Pro	Arg	Thr	Gly	Gln	Ile	Phe	Lys	Gln	Thr	Tyr	Ser
	130					135					140				
Lys	Phe	Asp	Thr	Asn	Ser	His	Asn	Asp	Asp	Ala	Leu	Leu	Lys	Asn	Tyr
145				150						155				160	
Gly	Leu	Leu	Tyr	Cys	Phe	Arg	Lys	Asp	Met	Asp	Lys	Val	Glu	Thr	Phe
			165					170						175	
Leu	Arg	Ile	Val	Gln	Cys	Gln	Ser	Val	Glu	Gly	Ser	Cys	Gly	Phe	
		180						185					190		

<210> 893

<211> 191

<212> PRT

<213> Homo sapiens

<400> 893

Phe	Pro	Thr	Ile	Pro	Leu	Ser	Arg	Leu	Phe	Asp	Asn	Ala	Met	Leu	Arg
1				5					10					15	
Ala	His	Arg	Leu	His	Gln	Leu	Ala	Phe	Asp	Thr	Tyr	Gln	Glu	Phe	Glu
			20					25					30		
Glu	Ala	Tyr	Ile	Pro	Lys	Glu	Gln	Lys	Tyr	Ser	Phe	Leu	Gln	Asn	Pro
		35				40						45			
Gln	Thr	Ser	Leu	Cys	Phe	Ser	Glu	Ser	Ile	Pro	Thr	Pro	Ser	Asn	Arg
	50				55					60					
Glu	Glu	Thr	Gln	Gln	Lys	Ser	Asn	Leu	Glu	Leu	Leu	Arg	Ile	Ser	Leu
65				70					75					80	
Leu	Leu	Ile	Gln	Ser	Trp	Leu	Glu	Pro	Val	Gln	Phe	Leu	Arg	Ser	Val
			85					90						95	
Phe	Ala	Asn	Ser	Leu	Val	Tyr	Gly	Ala	Ser	Asp	Ser	Asn	Val	Tyr	Asp
			100					105					110		
Leu	Leu	Lys	Asp	Leu	Glu	Glu	Gly	Ile	Gln	Thr	Leu	Met	Gly	Arg	Leu
		115					120					125			
Glu	Asp	Gly	Ser	Pro	Arg	Thr	Gly	Gln	Ile	Phe	Lys	Gln	Thr	Tyr	Ser
	130					135					140				
Lys	Phe	Asp	Thr	Asn	Ser	His	Asn	Asp	Asp	Ala	Leu	Leu	Lys	Asn	Tyr
145				150					155					160	
Gly	Leu	Leu	Tyr	Cys	Phe	Arg	Lys	Asp	Met	Asp	Lys	Val	Glu	Thr	Phe
			165					170						175	
Leu	Arg	Ile	Val	Gln	Cys	Arg	Ser	Val	Gln	Gly	Ser	Cys	Gly	Phe	
			180					185					190		

<210> 894  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

Phe	Pro	Thr	Ile	Pro	Leu	Ser	Arg	Leu	Phe	Asp	Asn	Ala	Met	Leu	Arg
1				5					10					15	
Ala	His	Arg	Leu	His	Gln	Leu	Ala	Phe	Asp	Thr	Tyr	Gln	Glu	Phe	Glu
			20					25					30		
Glu	Ala	Tyr	Ile	Pro	Lys	Glu	Gln	Lys	Tyr	Ser	Phe	Leu	Gln	Asn	Pro
		35				40						45			
Gln	Thr	Ser	Leu	Cys	Phe	Ser	Glu	Ser	Ile	Pro	Thr	Pro	Ser	Asn	Arg
	50				55					60					
Glu	Glu	Thr	Gln	Gln	Lys	Ser	Asn	Leu	Glu	Leu	Leu	Arg	Ile	Ser	Leu
65				70					75					80	
Leu	Leu	Ile	Gln	Ser	Trp	Leu	Glu	Pro	Val	Gln	Phe	Leu	Arg	Ser	Val
			85					90						95	
Phe	Ala	Asn	Ser	Leu	Val	Tyr	Gly	Ala	Ser	Asp	Ser	Asn	Val	Tyr	Asp
			100					105					110		
Leu	Leu	Lys	Asp	Leu	Glu	Glu	Gly	Ile	Gln	Thr	Leu	Met	Gly	Arg	Leu
		115					120					125			
Glu	Asp	Gly	Ser	Pro	Arg	Thr	Gly	Gln	Ile	Phe	Lys	Gln	Thr	Tyr	Ser
	130					135					140				
Lys	Phe	Asp	Thr	Asn	Ser	His	Asn	Asp	Asp	Ala	Leu	Leu	Lys	Asn	Tyr
145				150					155					160	
Gly	Leu	Leu	Tyr	Cys	Phe	Arg	Lys	Asp	Met	Asp	Lys	Val	Glu	Thr	Phe
			165					170						175	
Leu	Arg	Ile	Val	Gln	Cys	Arg	Ser	Val	Asn	Gly	Ser	Cys	Gly	Phe	
			180					185					190		

<210> 895  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 895  
 Phe Pro Thr Ile Pro Leu Ser Arg Leu Phe Asp Asn Ala Met Leu Arg

1	5	10																	
Ala	His	Arg	Leu	His	Gln	Leu	Ala	Phe	Asp	Thr	Tyr	Gln	Glu	Phe	Glu				
			20					25					30						
Glu	Ala	Tyr	Ile	Pro	Lys	Glu	Gln	Lys	Tyr	Ser	Phe	Leu	Gln	Asn	Pro				
		35					40					45							
Gln	Thr	Ser	Leu	Cys	Phe	Ser	Glu	Ser	Ile	Pro	Thr	Pro	Ser	Asn	Arg				
		50				55					60								
Glu	Glu	Thr	Gln	Gln	Lys	Ser	Asn	Leu	Glu	Leu	Arg	Ile	Ser	Leu					
65					70				75					80					
Leu	Leu	Ile	Gln	Ser	Trp	Leu	Glu	Pro	Val	Gln	Phe	Leu	Arg	Ser	Val				
				85				90					95						
Phe	Ala	Asn	Ser	Leu	Val	Tyr	Gly	Ala	Ser	Asp	Ser	Asn	Val	Tyr	Asp				
			100					105					110						
Leu	Leu	Lys	Asp	Leu	Glu	Glu	Gly	Ile	Gln	Thr	Leu	Met	Gly	Arg	Leu				
		115					120					125							
Glu	Asp	Gly	Ser	Pro	Arg	Thr	Gly	Gln	Ile	Phe	Lys	Gln	Thr	Tyr	Ser				
		130				135					140								
Lys	Phe	Asp	Thr	Asn	Ser	His	Asn	Asp	Asp	Ala	Leu	Leu	Lys	Asn	Tyr				
145					150				155					160					
Gly	Leu	Leu	Tyr	Cys	Phe	Arg	Lys	Asp	Met	Asp	Lys	Val	Glu	Thr	Phe				
				165				170					175						
Leu	Arg	Ile	Val	Gln	Cys	Arg	Ser	Val	His	Gly	Ser	Cys	Gly	Phe					
			180					185					190						

<210> 896  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 896																			
Val	Pro	Pro	Gly	Glu	Asp	Ser	Lys	Asp	Val	Ala	Ala	Pro	His	Arg	Gln				
1				5				10					15						
Pro	Leu	Thr	Ser	Ser	Glu	Arg	Ile	Asp	Lys	Gln	Ile	Arg	Tyr	Ile	Leu				
			20					25					30						
Asp	Gly	Ile	Ser	Ala	Leu	Arg	Lys	Glu	Thr	Cys	Asn	Lys	Ser	Asn	Met				
		35					40					45							
Cys	Glu	Ser	Ser	Lys	Glu	Ala	Leu	Ala	Glu	Asn	Asn	Leu	Asn	Leu	Ser				
		50				55					60								
Lys	Met	Ala	Glu	Lys	Asp	Gly	Cys	Phe	Gln	Ser	Gly	Phe	Asn	Glu	Glu				
65					70				75					80					
Thr	Cys	Leu	Val	Lys	Ile	Ile	Thr	Gly	Leu	Leu	Glu	Phe	Glu	Val	Tyr				
				85				90					95						
Leu	Glu	Tyr	Leu	Gln	Asn	Arg	Phe	Glu	Ser	Ser	Glu	Glu	Gln	Ala	Arg				
			100					105					110						
Ala	Val	Gln	Met	Ser	Thr	Lys	Val	Leu	Ile	Gln	Phe	Leu	Gln	Lys	Lys				
		115					120					125							
Ala	Lys	Asn	Leu	Asp	Ala	Ile	Thr	Thr	Pro	Asp	Pro	Thr	Thr	Asn	Ala				
		130				135					140								
Ser	Leu	Leu	Thr	Lys	Leu	Gln	Ala	Gln	Asn	Gln	Trp	Leu	Gln	Asp	Met				
145					150				155					160					
Thr	Thr	His	Leu	Ile	Leu	Arg	Ser	Phe	Lys	Glu	Phe	Leu	Gln	Ser	Ser				
				165				170					175						
Leu	Arg	Ala	Leu	Arg	Gln	Met													
				180															

<210> 897  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 897																			
Val	Pro	Pro	Gly	Glu	Asp	Ser	Lys	Asp	Val	Ala	Ala	Pro	His	Arg	Gln				
1				5				10					15						

Pro Leu Thr Ser Ser Arg Ile Asp Lys Gln Ile Arg Tyr Leu  
 20 25 30  
 Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met  
 35 40 45  
 Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Ala  
 50 55 60  
 Lys Met Ala Glu Lys Asp Gly Cys Phe Gln Ser Gly Phe Asn Glu Glu  
 65 70 75 80  
 Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr  
 85 90 95  
 Leu Glu Tyr Leu Gln Asn Arg Phe Glu Ser Ser Glu Glu Gln Ala Arg  
 100 105 110  
 Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys  
 115 120 125  
 Ala Lys Asn Leu Asp Ala Ile Thr Thr Pro Asp Pro Thr Thr Asn Ala  
 130 135 140  
 Ser Leu Leu Thr Lys Leu Gln Ala Gln Asn Gln Trp Leu Gln Asp Met  
 145 150 155 160  
 Thr Thr His Leu Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser  
 165 170 175  
 Leu Arg Ala Leu Arg Gln Met  
 180

<210> 898  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 898  
 Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln  
 1 5 10 15  
 Pro Leu Thr Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu  
 20 25 30  
 Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met  
 35 40 45  
 Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro  
 50 55 60  
 Gln Met Ala Glu Lys Asp Gly Cys Phe Gln Ser Gly Phe Asn Glu Glu  
 65 70 75 80  
 Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr  
 85 90 95  
 Leu Glu Tyr Leu Gln Asn Arg Phe Glu Ser Ser Glu Glu Gln Ala Arg  
 100 105 110  
 Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys  
 115 120 125  
 Ala Lys Asn Leu Asp Ala Ile Thr Thr Pro Asp Pro Thr Thr Asn Ala  
 130 135 140  
 Ser Leu Leu Thr Lys Leu Gln Ala Gln Asn Gln Trp Leu Gln Asp Met  
 145 150 155 160  
 Thr Thr His Leu Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser  
 165 170 175  
 Leu Arg Ala Leu Arg Gln Met  
 180

<210> 899  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 899  
 Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln  
 1 5 10 15  
 Pro Leu Thr Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu

Asp	Gly	Ile	20	Ser	Ala	Leu	Arg	Lys	25	Glu	Thr	Cys	Asn	Lys	30	Ser	Asn	Met
		35						40						45				
Cys	Glu	Ser	Ser	Lys	Glu	Ala	Leu	Ala	Glu	Asn	Asn	Leu	Asn	Leu	Pro			
	50				55				60									
Asn	Met	Ala	Glu	Lys	Asp	Gly	Cys	Phe	Gln	Ser	Gly	Phe	Asn	Glu	Glu			
65				70					75					80				
Thr	Cys	Leu	Val	Lys	Ile	Ile	Thr	Gly	Leu	Glu	Phe	Glu	Val	Tyr				
			85					90					95					
Leu	Glu	Tyr	Leu	Gln	Asn	Arg	Phe	Glu	Ser	Ser	Glu	Glu	Gln	Ala	Arg			
		100						105					110					
Ala	Val	Gln	Met	Ser	Thr	Lys	Val	Leu	Ile	Gln	Phe	Leu	Gln	Lys	Lys			
	115						120						125					
Ala	Lys	Asn	Leu	Asp	Ala	Ile	Thr	Thr	Pro	Asp	Pro	Thr	Thr	Asn	Ala			
	130					135				140								
Ser	Leu	Leu	Thr	Lys	Leu	Gln	Ala	Gln	Asn	Gln	Trp	Leu	Gln	Asp	Met			
145				150				155						160				
Thr	Thr	His	Leu	Ile	Leu	Arg	Ser	Phe	Lys	Glu	Phe	Leu	Gln	Ser	Ser			
			165					170						175				
Leu	Arg	Ala	Leu	Arg	Gln	Met												
			180															

<210> 900  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

Val	Pro	Pro	Gly	Glu	Asp	Ser	Lys	Asp	Val	Ala	Ala	Pro	His	Arg	Gln			
1			5					10					15					
Pro	Leu	Thr	Ser	Ser	Glu	Arg	Ile	Asp	Lys	Gln	Ile	Arg	Tyr	Ile	Leu			
		20						25					30					
Asp	Gly	Ile	Ser	Ala	Leu	Arg	Lys	Glu	Thr	Cys	Asn	Lys	Ser	Asn	Met			
	35						40					45						
Cys	Glu	Ser	Ser	Lys	Glu	Ala	Leu	Ala	Glu	Asn	Asn	Leu	Asn	Leu	Pro			
	50				55				60									
Lys	Val	Ala	Glu	Lys	Asp	Gly	Cys	Phe	Gln	Ser	Gly	Phe	Asn	Glu	Glu			
65				70				75						80				
Thr	Cys	Leu	Val	Lys	Ile	Ile	Thr	Gly	Leu	Leu	Glu	Phe	Glu	Val	Tyr			
			85					90					95					
Leu	Glu	Tyr	Leu	Gln	Asn	Arg	Phe	Glu	Ser	Ser	Glu	Glu	Gln	Ala	Arg			
		100						105					110					
Ala	Val	Gln	Met	Ser	Thr	Lys	Val	Leu	Ile	Gln	Phe	Leu	Gln	Lys	Lys			
	115						120						125					
Ala	Lys	Asn	Leu	Asp	Ala	Ile	Thr	Thr	Pro	Asp	Pro	Thr	Thr	Asn	Ala			
	130					135				140								
Ser	Leu	Leu	Thr	Lys	Leu	Gln	Ala	Gln	Asn	Gln	Trp	Leu	Gln	Asp	Met			
145				150				155						160				
Thr	Thr	His	Leu	Ile	Leu	Arg	Ser	Phe	Lys	Glu	Phe	Leu	Gln	Ser	Ser			
			165					170						175				
Leu	Arg	Ala	Leu	Arg	Gln	Met												
			180															

<210> 901  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

Val	Pro	Pro	Gly	Glu	Asp	Ser	Lys	Asp	Val	Ala	Ala	Pro	His	Arg	Gln			
1			5					10					15					
Pro	Leu	Thr	Ser	Ser	Glu	Arg	Ile	Asp	Lys	Gln	Ile	Arg	Tyr	Ile	Leu			
		20						25					30					



Asp	Gly	Ile	Ser	Ala	Leu	Arg	Lys	Glu	Thr	Cys	Asn	Lys	Ser	Asn	Met
	35						40					45			
Cys	Glu	Ser	Ser	Lys	Glu	Ala	Leu	Ala	Glu	Asn	Asn	Leu	Asn	Leu	Pro
	50					55					60				
Lys	Ile	Ala	Glu	Lys	Asp	Gly	Cys	Phe	Gln	Ser	Gly	Phe	Asn	Glu	Glu
	65				70					75					80
Thr	Cys	Leu	Val	Lys	Ile	Ile	Thr	Gly	Leu	Leu	Glu	Phe	Glu	Val	Tyr
				85				90						95	
Leu	Glu	Tyr	Leu	Gln	Asn	Arg	Phe	Glu	Ser	Ser	Glu	Glu	Gln	Ala	Arg
			100					105					110		
Ala	Val	Gln	Met	Ser	Thr	Lys	Val	Leu	Ile	Gln	Phe	Leu	Gln	Lys	Lys
		115					120					125			
Ala	Lys	Asn	Leu	Asp	Ala	Ile	Thr	Thr	Pro	Asp	Pro	Thr	Thr	Asn	Ala
	130					135					140				
Ser	Leu	Leu	Thr	Lys	Leu	Gln	Ala	Gln	Asn	Gln	Trp	Leu	Gln	Asp	Met
	145				150					155					160
Thr	Thr	His	Leu	Ile	Leu	Arg	Ser	Phe	Lys	Glu	Phe	Leu	Gln	Ser	Ser
			165						170					175	
Leu	Arg	Ala	Leu	Arg	Gln	Met									
			180												

<210> 902

<211> 183

<212> PRT

<213> Homo sapiens

<400> 902

Val	Pro	Pro	Gly	Glu	Asp	Ser	Lys	Asp	Val	Ala	Ala	Pro	His	Arg	Gln
1				5					10					15	
Pro	Leu	Thr	Ser	Ser	Glu	Arg	Ile	Asp	Lys	Gln	Ile	Arg	Tyr	Ile	Leu
			20					25					30		
Asp	Gly	Ile	Ser	Ala	Leu	Arg	Lys	Glu	Thr	Cys	Asn	Lys	Ser	Asn	Met
	35						40					45			
Cys	Glu	Ser	Ser	Lys	Glu	Ala	Leu	Ala	Glu	Asn	Asn	Leu	Asn	Leu	Pro
	50					55					60				
Lys	Met	Ala	Gln	Lys	Asp	Gly	Cys	Phe	Gln	Ser	Gly	Phe	Asn	Glu	Glu
	65				70					75					80
Thr	Cys	Leu	Val	Lys	Ile	Ile	Thr	Gly	Leu	Leu	Glu	Phe	Glu	Val	Tyr
				85				90						95	
Leu	Glu	Tyr	Leu	Gln	Asn	Arg	Phe	Glu	Ser	Ser	Glu	Glu	Gln	Ala	Arg
			100					105					110		
Ala	Val	Gln	Met	Ser	Thr	Lys	Val	Leu	Ile	Gln	Phe	Leu	Gln	Lys	Lys
		115					120					125			
Ala	Lys	Asn	Leu	Asp	Ala	Ile	Thr	Thr	Pro	Asp	Pro	Thr	Thr	Asn	Ala
	130					135					140				
Ser	Leu	Leu	Thr	Lys	Leu	Gln	Ala	Gln	Asn	Gln	Trp	Leu	Gln	Asp	Met
	145				150					155					160
Thr	Thr	His	Leu	Ile	Leu	Arg	Ser	Phe	Lys	Glu	Phe	Leu	Gln	Ser	Ser
			165						170					175	
Leu	Arg	Ala	Leu	Arg	Gln	Met									
			180												

<210> 903

<211> 183

<212> PRT

<213> Homo sapiens

<400> 903

Val	Pro	Pro	Gly	Glu	Asp	Ser	Lys	Asp	Val	Ala	Ala	Pro	His	Arg	Gln
1				5					10					15	
Pro	Leu	Thr	Ser	Ser	Glu	Arg	Ile	Asp	Lys	Gln	Ile	Arg	Tyr	Ile	Leu
			20					25					30		
Asp	Gly	Ile	Ser	Ala	Leu	Arg	Lys	Glu	Thr	Cys	Asn	Lys	Ser	Asn	Met



Cys Glu Ser Ser Lys Ala Leu Ala Glu Asn Asn Leu Asn Pro  
 50 55 60  
 Lys Met Ala Glu Gln Asp Gly Cys Phe Gln Ser Gly Phe Asn Glu Glu  
 65 70 75 80  
 Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr  
 85 90 95  
 Leu Glu Tyr Leu Gln Asn Arg Phe Glu Ser Ser Glu Glu Gln Ala Arg  
 100 105 110  
 Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys  
 115 120 125  
 Ala Lys Asn Leu Asp Ala Ile Thr Thr Pro Asp Pro Thr Thr Asn Ala  
 130 135 140  
 Ser Leu Leu Thr Lys Leu Gln Ala Gln Asn Gln Trp Leu Gln Asp Met  
 145 150 155 160  
 Thr Thr His Leu Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser  
 165 170 175  
 Leu Arg Ala Leu Arg Gln Met  
 180

<210> 906  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 906  
 Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln  
 1 5 10 15  
 Pro Leu Thr Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu  
 20 25 30  
 Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met  
 35 40 45  
 Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro  
 50 55 60  
 Lys Met Ala Glu Asn Asp Gly Cys Phe Gln Ser Gly Phe Asn Glu Glu  
 65 70 75 80  
 Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr  
 85 90 95  
 Leu Glu Tyr Leu Gln Asn Arg Phe Glu Ser Ser Glu Glu Gln Ala Arg  
 100 105 110  
 Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys  
 115 120 125  
 Ala Lys Asn Leu Asp Ala Ile Thr Thr Pro Asp Pro Thr Thr Asn Ala  
 130 135 140  
 Ser Leu Leu Thr Lys Leu Gln Ala Gln Asn Gln Trp Leu Gln Asp Met  
 145 150 155 160  
 Thr Thr His Leu Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser  
 165 170 175  
 Leu Arg Ala Leu Arg Gln Met  
 180

<210> 907  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 907  
 Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln  
 1 5 10 15  
 Pro Leu Thr Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu  
 20 25 30  
 Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met  
 35 40 45  
 Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro

50		55		60
Lys Met Ala Glu Lys	Asp Gly Cys Ile Gln Ser Gly Phe Asn Glu Glu			
65	70	75	80	
Thr Cys Leu Val Lys	Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr			
	85	90	95	
Leu Glu Tyr Leu Gln	Asn Arg Phe Glu Ser Ser Glu Glu Gln Ala Arg			
	100	105	110	
Ala Val Gln Met Ser	Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys			
	115	120	125	
Ala Lys Asn Leu Asp	Ala Ile Thr Thr Pro Asp Pro Thr Thr Asn Ala			
	130	135	140	
Ser Leu Leu Thr Lys	Leu Gln Ala Gln Asn Gln Trp Leu Gln Asp Met			
145	150	155	160	
Thr Thr His Leu Ile	Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser			
	165	170	175	
Leu Arg Ala Leu Arg	Gln Met			
	180			

<210> 908  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 908
Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln
1 5 10 15
Pro Leu Thr Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu
20 25 30
Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met
35 40 45
Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro
50 55 60
Lys Met Ala Glu Lys Asp Gly Cys Val Gln Ser Gly Phe Asn Glu Glu
65 70 75 80
Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr
85 90 95
Leu Glu Tyr Leu Gln Asn Arg Phe Glu Ser Ser Glu Glu Gln Ala Arg
100 105 110
Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys
115 120 125
Ala Lys Asn Leu Asp Ala Ile Thr Thr Pro Asp Pro Thr Thr Asn Ala
130 135 140
Ser Leu Leu Thr Lys Leu Gln Ala Gln Asn Gln Trp Leu Gln Asp Met
145 150 155 160
Thr Thr His Leu Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser
165 170 175
Leu Arg Ala Leu Arg Gln Met
180

<210> 909  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 909
Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln
1 5 10 15
Pro Leu Thr Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu
20 25 30
Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met
35 40 45
Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro
50 55 60

Lys Met Ala Glu Lys Asp Gly Cys Phe Gln Ser Gly Ile Asn Glu Glu  
 65 70 75 80  
 Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr  
 85 90 95  
 Leu Glu Tyr Leu Gln Asn Arg Phe Glu Ser Ser Glu Glu Gln Ala Arg  
 100 105 110  
 Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys  
 115 120 125  
 Ala Lys Asn Leu Asp Ala Ile Thr Thr Pro Asp Pro Thr Thr Asn Ala  
 130 135 140  
 Ser Leu Leu Thr Lys Leu Gln Ala Gln Asn Gln Trp Leu Gln Asp Met  
 145 150 155 160  
 Thr Thr His Leu Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser  
 165 170 175  
 Leu Arg Ala Leu Arg Gln Met  
 180

<210> 910  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 910  
 Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln  
 1 5 10 15  
 Pro Leu Thr Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu  
 20 25 30  
 Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met  
 35 40 45  
 Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro  
 50 55 60  
 Lys Met Ala Glu Lys Asp Gly Cys Phe Gln Ser Gly Val Asn Glu Glu  
 65 70 75 80  
 Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr  
 85 90 95  
 Leu Glu Tyr Leu Gln Asn Arg Phe Glu Ser Ser Glu Glu Gln Ala Arg  
 100 105 110  
 Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys  
 115 120 125  
 Ala Lys Asn Leu Asp Ala Ile Thr Thr Pro Asp Pro Thr Thr Asn Ala  
 130 135 140  
 Ser Leu Leu Thr Lys Leu Gln Ala Gln Asn Gln Trp Leu Gln Asp Met  
 145 150 155 160  
 Thr Thr His Leu Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser  
 165 170 175  
 Leu Arg Ala Leu Arg Gln Met  
 180

<210> 911  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 911  
 Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln  
 1 5 10 15  
 Pro Leu Thr Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu  
 20 25 30  
 Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met  
 35 40 45  
 Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro  
 50 55 60  
 Lys Met Ala Glu Lys Asp Gly Cys Phe Gln Ser Gly Phe Asn Glu Glu

65	Thr	Cys	Leu	Val	Lys	Ile	Ile	Thr	Gly	Leu	Leu	Gln	Phe	Glu	Val	Tyr	80
					85					90							95
	Leu	Glu	Tyr	Leu	Gln	Asn	Arg	Phe	Glu	Ser	Ser	Glu	Glu	Gln	Ala	Arg	
				100					105					110			
	Ala	Val	Gln	Met	Ser	Thr	Lys	Val	Leu	Ile	Gln	Phe	Leu	Gln	Lys	Lys	
				115					120					125			
	Ala	Lys	Asn	Leu	Asp	Ala	Ile	Thr	Thr	Pro	Asp	Pro	Thr	Thr	Asn	Ala	
				130					135					140			
	Ser	Leu	Leu	Thr	Lys	Leu	Gln	Ala	Gln	Asn	Gln	Trp	Leu	Gln	Asp	Met	
				145										155			160
	Thr	Thr	His	Leu	Ile	Leu	Arg	Ser	Phe	Lys	Glu	Phe	Leu	Gln	Ser	Ser	
					165					170							175
	Leu	Arg	Ala	Leu	Arg	Gln	Met										
				180													

<210> 912  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 912	Val	Pro	Pro	Gly	Glu	Asp	Ser	Lys	Asp	Val	Ala	Ala	Pro	His	Arg	Gln	
	1				5					10						15	
	Pro	Leu	Thr	Ser	Ser	Glu	Arg	Ile	Asp	Lys	Gln	Ile	Arg	Tyr	Ile	Leu	
				20					25					30			
	Asp	Gly	Ile	Ser	Ala	Leu	Arg	Lys	Glu	Thr	Cys	Asn	Lys	Ser	Asn	Met	
				35				40					45				
	Cys	Glu	Ser	Ser	Lys	Glu	Ala	Leu	Ala	Glu	Asn	Asn	Leu	Asn	Leu	Pro	
				50			55				60						
	Lys	Met	Ala	Glu	Lys	Asp	Gly	Cys	Phe	Gln	Ser	Gly	Phe	Asn	Glu	Glu	
	65					70				75						80	
	Thr	Cys	Leu	Val	Lys	Ile	Ile	Thr	Gly	Leu	Leu	Asn	Phe	Glu	Val	Tyr	
					85					90					95		
	Leu	Glu	Tyr	Leu	Gln	Asn	Arg	Phe	Glu	Ser	Ser	Glu	Glu	Gln	Ala	Arg	
				100					105					110			
	Ala	Val	Gln	Met	Ser	Thr	Lys	Val	Leu	Ile	Gln	Phe	Leu	Gln	Lys	Lys	
				115					120					125			
	Ala	Lys	Asn	Leu	Asp	Ala	Ile	Thr	Thr	Pro	Asp	Pro	Thr	Thr	Asn	Ala	
				130				135					140				
	Ser	Leu	Leu	Thr	Lys	Leu	Gln	Ala	Gln	Asn	Gln	Trp	Leu	Gln	Asp	Met	
				145				150				155				160	
	Thr	Thr	His	Leu	Ile	Leu	Arg	Ser	Phe	Lys	Glu	Phe	Leu	Gln	Ser	Ser	
					165					170						175	
	Leu	Arg	Ala	Leu	Arg	Gln	Met										
				180													

<210> 913  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 913	Val	Pro	Pro	Gly	Glu	Asp	Ser	Lys	Asp	Val	Ala	Ala	Pro	His	Arg	Gln	
	1				5					10						15	
	Pro	Leu	Thr	Ser	Ser	Glu	Arg	Ile	Asp	Lys	Gln	Ile	Arg	Tyr	Ile	Leu	
				20					25					30			
	Asp	Gly	Ile	Ser	Ala	Leu	Arg	Lys	Glu	Thr	Cys	Asn	Lys	Ser	Asn	Met	
				35				40					45				
	Cys	Glu	Ser	Ser	Lys	Glu	Ala	Leu	Ala	Glu	Asn	Asn	Leu	Asn	Leu	Pro	
				50			55				60						
	Lys	Met	Ala	Glu	Lys	Asp	Gly	Cys	Phe	Gln	Ser	Gly	Phe	Asn	Glu	Glu	
	65					70				75						80	

Thr Cys Leu Val Lys 85 Ile Thr Gly Leu Leu His Phe Glu 95 Tyr  
 Leu Glu Tyr Leu Gln Asn Arg Phe Glu 90 Ser Ser Glu Glu Gln Ala Arg  
 100 105 110  
 Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys  
 115 120 125  
 Ala Lys Asn Leu Asp Ala Ile Thr Thr Pro Asp Pro Thr Thr Asn Ala  
 130 135 140  
 Ser Leu Leu Thr Lys Leu Gln Ala Gln Asn Gln Trp Leu Gln Asp Met  
 145 150 155 160  
 Thr Thr His Leu Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser  
 165 170 175  
 Leu Arg Ala Leu Arg Gln Met  
 180

<210> 914  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 914  
 Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln  
 1 5 10 15  
 Pro Leu Thr Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu  
 20 25 30  
 Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met  
 35 40 45  
 Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro  
 50 55 60  
 Lys Met Ala Glu Lys Asp Gly Cys Phe Gln Ser Gly Phe Asn Glu Glu  
 65 70 75 80  
 Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr  
 85 90 95  
 Leu Gln Tyr Leu Gln Asn Arg Phe Glu Ser Ser Glu Glu Gln Ala Arg  
 100 105 110  
 Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys  
 115 120 125  
 Ala Lys Asn Leu Asp Ala Ile Thr Thr Pro Asp Pro Thr Thr Asn Ala  
 130 135 140  
 Ser Leu Leu Thr Lys Leu Gln Ala Gln Asn Gln Trp Leu Gln Asp Met  
 145 150 155 160  
 Thr Thr His Leu Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser  
 165 170 175  
 Leu Arg Ala Leu Arg Gln Met  
 180

<210> 915  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 915  
 Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln  
 1 5 10 15  
 Pro Leu Thr Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu  
 20 25 30  
 Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met  
 35 40 45  
 Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro  
 50 55 60  
 Lys Met Ala Glu Lys Asp Gly Cys Phe Gln Ser Gly Phe Asn Glu Glu  
 65 70 75 80  
 Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr





Leu Glu Tyr Leu Gln His Phe Glu Ser Ser Glu Glu Gln Ala Arg  
 100 105 110  
 Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys  
 115 120 125  
 Ala Lys Asn Leu Asp Ala Ile Thr Thr Pro Asp Pro Thr Thr Asn Ala  
 130 135 140  
 Ser Leu Leu Thr Lys Leu Gln Ala Gln Asn Gln Trp Leu Gln Asp Met  
 145 150 155 160  
 Thr Thr His Leu Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser  
 165 170 175  
 Leu Arg Ala Leu Arg Gln Met  
 180

<210> 918  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 918  
 Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln  
 1 5 10 15  
 Pro Leu Thr Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu  
 20 25 30  
 Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met  
 35 40 45  
 Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro  
 50 55 60  
 Lys Met Ala Glu Lys Asp Gly Cys Phe Gln Ser Gly Phe Asn Glu Glu  
 65 70 75 80  
 Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr  
 85 90 95  
 Leu Glu Tyr Leu Gln Asn Gln Phe Glu Ser Ser Glu Glu Gln Ala Arg  
 100 105 110  
 Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys  
 115 120 125  
 Ala Lys Asn Leu Asp Ala Ile Thr Thr Pro Asp Pro Thr Thr Asn Ala  
 130 135 140  
 Ser Leu Leu Thr Lys Leu Gln Ala Gln Asn Gln Trp Leu Gln Asp Met  
 145 150 155 160  
 Thr Thr His Leu Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser  
 165 170 175  
 Leu Arg Ala Leu Arg Gln Met  
 180

<210> 919  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 919  
 Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln  
 1 5 10 15  
 Pro Leu Thr Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu  
 20 25 30  
 Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met  
 35 40 45  
 Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro  
 50 55 60  
 Lys Met Ala Glu Lys Asp Gly Cys Phe Gln Ser Gly Phe Asn Glu Glu  
 65 70 75 80  
 Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr  
 85 90 95  
 Leu Glu Tyr Leu Gln Asn Arg Phe Gln Ser Ser Glu Glu Gln Ala Arg

Ala	Val	Gln	Met	Ser	Thr	Lys	Val	Leu	Ile	Gln	Phe	Leu	Gln	Lys	Lys
		115						120					125		
Ala	Lys	Asn	Leu	Asp	Ala	Ile	Thr	Thr	Pro	Asp	Pro	Thr	Thr	Asn	Ala
		130						135					140		
Ser	Leu	Leu	Thr	Lys	Leu	Gln	Ala	Gln	Asn	Gln	Trp	Leu	Gln	Asp	Met
		145				150				155					160
Thr	Thr	His	Leu	Ile	Leu	Arg	Ser	Phe	Lys	Glu	Phe	Leu	Gln	Ser	Ser
			165						170						175
Leu	Arg	Ala	Leu	Arg	Gln	Met									
			180												

<210> 920  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 920

Val	Pro	Pro	Gly	Glu	Asp	Ser	Lys	Asp	Val	Ala	Ala	Pro	His	Arg	Gln
1				5					10					15	
Pro	Leu	Thr	Ser	Ser	Glu	Arg	Ile	Asp	Lys	Gln	Ile	Arg	Tyr	Ile	Leu
			20					25					30		
Asp	Gly	Ile	Ser	Ala	Leu	Arg	Lys	Glu	Thr	Cys	Asn	Lys	Ser	Asn	Met
		35					40					45			
Cys	Glu	Ser	Ser	Lys	Glu	Ala	Leu	Ala	Glu	Asn	Asn	Leu	Asn	Leu	Pro
	50					55					60				
Lys	Met	Ala	Glu	Lys	Asp	Gly	Cys	Phe	Gln	Ser	Gly	Phe	Asn	Glu	Glu
	65				70				75						80
Thr	Cys	Leu	Val	Lys	Ile	Ile	Thr	Gly	Leu	Leu	Glu	Phe	Glu	Val	Tyr
			85					90					95		
Leu	Glu	Tyr	Leu	Gln	Asn	Arg	Phe	Asn	Ser	Ser	Glu	Glu	Gln	Ala	Arg
			100					105					110		
Ala	Val	Gln	Met	Ser	Thr	Lys	Val	Leu	Ile	Gln	Phe	Leu	Gln	Lys	Lys
		115					120						125		
Ala	Lys	Asn	Leu	Asp	Ala	Ile	Thr	Thr	Pro	Asp	Pro	Thr	Thr	Asn	Ala
		130					135					140			
Ser	Leu	Leu	Thr	Lys	Leu	Gln	Ala	Gln	Asn	Gln	Trp	Leu	Gln	Asp	Met
		145				150				155					160
Thr	Thr	His	Leu	Ile	Leu	Arg	Ser	Phe	Lys	Glu	Phe	Leu	Gln	Ser	Ser
			165						170						175
Leu	Arg	Ala	Leu	Arg	Gln	Met									
			180												

<210> 921  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 921

Val	Pro	Pro	Gly	Glu	Asp	Ser	Lys	Asp	Val	Ala	Ala	Pro	His	Arg	Gln
1				5					10					15	
Pro	Leu	Thr	Ser	Ser	Glu	Arg	Ile	Asp	Lys	Gln	Ile	Arg	Tyr	Ile	Leu
			20					25					30		
Asp	Gly	Ile	Ser	Ala	Leu	Arg	Lys	Glu	Thr	Cys	Asn	Lys	Ser	Asn	Met
		35					40					45			
Cys	Glu	Ser	Ser	Lys	Glu	Ala	Leu	Ala	Glu	Asn	Asn	Leu	Asn	Leu	Pro
	50					55					60				
Lys	Met	Ala	Glu	Lys	Asp	Gly	Cys	Phe	Gln	Ser	Gly	Phe	Asn	Glu	Glu
	65				70				75						80
Thr	Cys	Leu	Val	Lys	Ile	Ile	Thr	Gly	Leu	Leu	Glu	Phe	Glu	Val	Tyr
			85					90					95		
Leu	Glu	Tyr	Leu	Gln	Asn	Arg	Phe	His	Ser	Ser	Glu	Glu	Gln	Ala	Arg
			100					105					110		

Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys  
 115 120 125  
 Ala Lys Asn Leu Asp Ala Ile Thr Thr Pro Asp Pro Thr Thr Asn Ala  
 130 135 140  
 Ser Leu Leu Thr Lys Leu Gln Ala Gln Asn Gln Trp Leu Gln Asp Met  
 145 150 155 160  
 Thr Thr His Leu Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser  
 165 170 175  
 Leu Arg Ala Leu Arg Gln Met  
 180

<210> 922  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 922  
 Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln  
 1 5 10 15  
 Pro Leu Thr Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu  
 20 25 30  
 Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met  
 35 40 45  
 Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro  
 50 55 60  
 Lys Met Ala Glu Lys Asp Gly Cys Phe Gln Ser Gly Phe Asn Glu Glu  
 65 70 75 80  
 Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr  
 85 90 95  
 Leu Glu Tyr Leu Gln Asn Arg Phe Glu Ser Ser Gln Glu Gln Ala Arg  
 100 105 110  
 Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys  
 115 120 125  
 Ala Lys Asn Leu Asp Ala Ile Thr Thr Pro Asp Pro Thr Thr Asn Ala  
 130 135 140  
 Ser Leu Leu Thr Lys Leu Gln Ala Gln Asn Gln Trp Leu Gln Asp Met  
 145 150 155 160  
 Thr Thr His Leu Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser  
 165 170 175  
 Leu Arg Ala Leu Arg Gln Met  
 180

<210> 923  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 923  
 Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln  
 1 5 10 15  
 Pro Leu Thr Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu  
 20 25 30  
 Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met  
 35 40 45  
 Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro  
 50 55 60  
 Lys Met Ala Glu Lys Asp Gly Cys Phe Gln Ser Gly Phe Asn Glu Glu  
 65 70 75 80  
 Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr  
 85 90 95  
 Leu Glu Tyr Leu Gln Asn Arg Phe Glu Ser Ser Asn Glu Gln Ala Arg  
 100 105 110  
 Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys

115	120	125
Ala Lys Asn Leu Asp	Ala Ile Thr Thr Pro Asp	Pro Thr Thr Asn Ala
130	135	140
Ser Leu Leu Thr Lys	Leu Gln Ala Gln Asn Gln Trp	Leu Gln Asp Met
145	150	155
Thr Thr His Leu Ile	Leu Arg Ser Phe Lys Glu Phe	Leu Gln Ser Ser
165	170	175
Leu Arg Ala Leu Arg	Gln Met	
180		

<210> 924  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 924
Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln
1 5 10 15
Pro Leu Thr Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu
20 25 30
Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met
35 40 45
Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro
50 55 60
Lys Met Ala Glu Lys Asp Gly Cys Phe Gln Ser Gly Phe Asn Glu Glu
65 70 75 80
Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr
85 90 95
Leu Glu Tyr Leu Gln Asn Arg Phe Glu Ser Ser His Glu Gln Ala Arg
100 105 110
Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys
115 120 125
Ala Lys Asn Leu Asp Ala Ile Thr Thr Pro Asp Pro Thr Thr Asn Ala
130 135 140
Ser Leu Leu Thr Lys Leu Gln Ala Gln Asn Gln Trp Leu Gln Asp Met
145 150 155 160
Thr Thr His Leu Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser
165 170 175
Leu Arg Ala Leu Arg Gln Met
180

<210> 925  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 925
Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln
1 5 10 15
Pro Leu Thr Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu
20 25 30
Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met
35 40 45
Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro
50 55 60
Lys Met Ala Glu Lys Asp Gly Cys Phe Gln Ser Gly Phe Asn Glu Glu
65 70 75 80
Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr
85 90 95
Leu Glu Tyr Leu Gln Asn Arg Phe Glu Ser Ser Glu Glu Gln Ala Arg
100 105 110
Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys
115 120 125

Ala Lys Asn Leu Gln Ile Thr Thr Pro Asp Pro Thr Thr Ala  
 130 135 140  
 Ser Leu Leu Thr Lys Leu Gln Ala Gln Asn Gln Trp Leu Gln Asp Met  
 145 150 155 160  
 Thr Thr His Leu Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser  
 165 170 175  
 Leu Arg Ala Leu Arg Gln Met  
 180

<210> 926  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 926  
 Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln  
 1 5 10 15  
 Pro Leu Thr Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu  
 20 25 30  
 Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met  
 35 40 45  
 Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro  
 50 55 60  
 Lys Met Ala Glu Lys Asp Gly Cys Phe Gln Ser Gly Phe Asn Glu Glu  
 65 70 75 80  
 Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr  
 85 90 95  
 Leu Glu Tyr Leu Gln Asn Arg Phe Glu Ser Ser Glu Glu Gln Ala Arg  
 100 105 110  
 Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys  
 115 120 125  
 Ala Lys Asn Leu Asn Ala Ile Thr Thr Pro Asp Pro Thr Thr Asn Ala  
 130 135 140  
 Ser Leu Leu Thr Lys Leu Gln Ala Gln Asn Gln Trp Leu Gln Asp Met  
 145 150 155 160  
 Thr Thr His Leu Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser  
 165 170 175  
 Leu Arg Ala Leu Arg Gln Met  
 180

<210> 927  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 927  
 Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln  
 1 5 10 15  
 Pro Leu Thr Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu  
 20 25 30  
 Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met  
 35 40 45  
 Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro  
 50 55 60  
 Lys Met Ala Glu Lys Asp Gly Cys Phe Gln Ser Gly Phe Asn Glu Glu  
 65 70 75 80  
 Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr  
 85 90 95  
 Leu Glu Tyr Leu Gln Asn Arg Phe Glu Ser Ser Glu Glu Gln Ala Arg  
 100 105 110  
 Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys  
 115 120 125  
 Ala Lys Asn Leu Asp Ala Ile Thr Thr Ser Asp Pro Thr Thr Asn Ala

130                      135                      140  
 Ser Leu Leu Thr Lys Leu Gln Ala Gln Asn Gln Trp Leu Gln Asp Met  
 145                      150                      155                      160  
 Thr Thr His Leu Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser  
                                  165                      170                      175  
 Leu Arg Ala Leu Arg Gln Met  
                                  180

<210> 928  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 928  
 Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln  
 1                      5                      10                      15  
 Pro Leu Thr Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu  
                                  20                      25                      30  
 Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met  
                                  35                      40                      45  
 Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro  
                                  50                      55                      60  
 Lys Met Ala Glu Lys Asp Gly Cys Phe Gln Ser Gly Phe Asn Glu Glu  
 65                      70                      75                      80  
 Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr  
                                  85                      90                      95  
 Leu Glu Tyr Leu Gln Asn Arg Phe Glu Ser Ser Glu Glu Gln Ala Arg  
                                  100                      105                      110  
 Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys  
                                  115                      120                      125  
 Ala Lys Asn Leu Asp Ala Ile Thr Thr Ala Asp Pro Thr Thr Asn Ala  
 130                      135                      140  
 Ser Leu Leu Thr Lys Leu Gln Ala Gln Asn Gln Trp Leu Gln Asp Met  
 145                      150                      155                      160  
 Thr Thr His Leu Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser  
                                  165                      170                      175  
 Leu Arg Ala Leu Arg Gln Met  
                                  180

<210> 929  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 929  
 Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln  
 1                      5                      10                      15  
 Pro Leu Thr Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu  
                                  20                      25                      30  
 Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met  
                                  35                      40                      45  
 Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro  
                                  50                      55                      60  
 Lys Met Ala Glu Lys Asp Gly Cys Phe Gln Ser Gly Phe Asn Glu Glu  
 65                      70                      75                      80  
 Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr  
                                  85                      90                      95  
 Leu Glu Tyr Leu Gln Asn Arg Phe Glu Ser Ser Glu Glu Gln Ala Arg  
                                  100                      105                      110  
 Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys  
                                  115                      120                      125  
 Ala Lys Asn Leu Asp Ala Ile Thr Thr Pro Gln Pro Thr Thr Asn Ala  
 130                      135                      140

Ser Leu Leu Thr Lys Val Gln Ala Gln Asn Gln Trp Leu Gln Met  
 145 150 155 160  
 Thr Thr His Leu Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser  
 165 170 175  
 Leu Arg Ala Leu Arg Gln Met  
 180

<210> 930  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 930  
 Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln  
 1 5 10 15  
 Pro Leu Thr Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu  
 20 25 30  
 Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met  
 35 40 45  
 Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro  
 50 55 60  
 Lys Met Ala Glu Lys Asp Gly Cys Phe Gln Ser Gly Phe Asn Glu Glu  
 65 70 75 80  
 Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr  
 85 90 95  
 Leu Glu Tyr Leu Gln Asn Arg Phe Glu Ser Ser Glu Glu Gln Ala Arg  
 100 105 110  
 Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys  
 115 120 125  
 Ala Lys Asn Leu Asp Ala Ile Thr Thr Pro Asn Pro Thr Thr Asn Ala  
 130 135 140  
 Ser Leu Leu Thr Lys Leu Gln Ala Gln Asn Gln Trp Leu Gln Asp Met  
 145 150 155 160  
 Thr Thr His Leu Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser  
 165 170 175  
 Leu Arg Ala Leu Arg Gln Met  
 180

<210> 931  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 931  
 Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln  
 1 5 10 15  
 Pro Leu Thr Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu  
 20 25 30  
 Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met  
 35 40 45  
 Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro  
 50 55 60  
 Lys Met Ala Glu Lys Asp Gly Cys Phe Gln Ser Gly Phe Asn Glu Glu  
 65 70 75 80  
 Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr  
 85 90 95  
 Leu Glu Tyr Leu Gln Asn Arg Phe Glu Ser Ser Glu Glu Gln Ala Arg  
 100 105 110  
 Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys  
 115 120 125  
 Ala Lys Asn Leu Asp Ala Ile Thr Thr Pro Asp Ser Thr Thr Asn Ala  
 130 135 140  
 Ser Leu Leu Thr Lys Leu Gln Ala Gln Asn Gln Trp Leu Gln Asp Met

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<210> 932
<211> 183
<212> PRT
<213> Homo sapiens
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<210> 933
<211> 183
<212> PRT
<213> Homo sapiens
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444



Thr Thr His Leu Ile Arg Ser Phe Lys Glu Phe Leu Gln Ser  
 165 170 175  
 Leu Arg Ala Leu Arg Gln Met  
 180

<210> 934  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 934  
 Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln  
 1 5 10 15  
 Pro Leu Thr Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu  
 20 25 30  
 Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met  
 35 40 45  
 Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro  
 50 55 60  
 Lys Met Ala Glu Lys Asp Gly Cys Phe Gln Ser Gly Phe Asn Glu Glu  
 65 70 75 80  
 Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr  
 85 90 95  
 Leu Glu Tyr Leu Gln Asn Arg Phe Glu Ser Ser Glu Glu Gln Ala Arg  
 100 105 110  
 Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys  
 115 120 125  
 Ala Lys Asn Leu Asp Ala Ile Thr Thr Pro Asp Pro Thr Thr Asn Ala  
 130 135 140  
 Ser Leu Leu Thr Asn Leu Gln Ala Gln Asn Gln Trp Leu Gln Asp Met  
 145 150 155 160  
 Thr Thr His Leu Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser  
 165 170 175  
 Leu Arg Ala Leu Arg Gln Met  
 180

<210> 935  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 935  
 Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln  
 1 5 10 15  
 Pro Leu Thr Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu  
 20 25 30  
 Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met  
 35 40 45  
 Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro  
 50 55 60  
 Lys Met Ala Glu Lys Asp Gly Cys Phe Gln Ser Gly Phe Asn Glu Glu  
 65 70 75 80  
 Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr  
 85 90 95  
 Leu Glu Tyr Leu Gln Asn Arg Phe Glu Ser Ser Glu Glu Gln Ala Arg  
 100 105 110  
 Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys  
 115 120 125  
 Ala Lys Asn Leu Asp Ala Ile Thr Thr Pro Asp Pro Thr Thr Asn Ala  
 130 135 140  
 Ser Leu Leu Thr Lys Leu Gln Ala Gln Asn Gln Ser Leu Gln Asp Met  
 145 150 155 160  
 Thr Thr His Leu Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser

165  
Leu Arg Ala Leu Arg Gln Met  
180

170

<210> 936  
<211> 183  
<212> PRT  
<213> Homo sapiens

<400> 936  
Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln  
1 5 10 15  
Pro Leu Thr Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu  
20 25 30  
Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met  
35 40 45  
Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro  
50 55 60  
Lys Met Ala Glu Lys Asp Gly Cys Phe Gln Ser Gly Phe Asn Glu Glu  
65 70 75 80  
Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr  
85 90 95  
Leu Glu Tyr Leu Gln Asn Arg Phe Glu Ser Ser Glu Glu Gln Ala Arg  
100 105 110  
Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys  
115 120 125  
Ala Lys Asn Leu Asp Ala Ile Thr Thr Pro Asp Pro Thr Thr Asn Ala  
130 135 140  
Ser Leu Leu Thr Lys Leu Gln Ala Gln Asn Gln His Leu Gln Asp Met  
145 150 155 160  
Thr Thr His Leu Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser  
165 170 175  
Leu Arg Ala Leu Arg Gln Met  
180

<210> 937  
<211> 183  
<212> PRT  
<213> Homo sapiens

<400> 937  
Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln  
1 5 10 15  
Pro Leu Thr Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu  
20 25 30  
Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met  
35 40 45  
Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro  
50 55 60  
Lys Met Ala Glu Lys Asp Gly Cys Phe Gln Ser Gly Phe Asn Glu Glu  
65 70 75 80  
Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr  
85 90 95  
Leu Glu Tyr Leu Gln Asn Arg Phe Glu Ser Ser Glu Glu Gln Ala Arg  
100 105 110  
Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys  
115 120 125  
Ala Lys Asn Leu Asp Ala Ile Thr Thr Pro Asp Pro Thr Thr Asn Ala  
130 135 140  
Ser Leu Leu Thr Lys Leu Gln Ala Gln Asn Gln Trp Leu Gln Asp Met  
145 150 155 160  
Thr Thr His Leu Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser  
165 170 175

Leu His Ala Leu Arg Met  
180

<210> 938  
<211> 183  
<212> PRT  
<213> Homo sapiens

<400> 938  
Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln  
1 5 10 15  
Pro Leu Thr Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu  
20 25 30  
Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met  
35 40 45  
Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro  
50 55 60  
Lys Met Ala Glu Lys Asp Gly Cys Phe Gln Ser Gly Phe Asn Glu Glu  
65 70 75 80  
Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr  
85 90 95  
Leu Glu Tyr Leu Gln Asn Arg Phe Glu Ser Ser Glu Glu Gln Ala Arg  
100 105 110  
Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys  
115 120 125  
Ala Lys Asn Leu Asp Ala Ile Thr Thr Pro Asp Pro Thr Thr Asn Ala  
130 135 140  
Ser Leu Leu Thr Lys Leu Gln Ala Gln Asn Gln Trp Leu Gln Asp Met  
145 150 155 160  
Thr Thr His Leu Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser  
165 170 175  
Leu Gln Ala Leu Arg Gln Met  
180

<210> 939  
<211> 183  
<212> PRT  
<213> Homo sapiens

<400> 939  
Val Pro Pro Gly Glu Asp Ser Lys Asp Val Ala Ala Pro His Arg Gln  
1 5 10 15  
Pro Leu Thr Ser Ser Glu Arg Ile Asp Lys Gln Ile Arg Tyr Ile Leu  
20 25 30  
Asp Gly Ile Ser Ala Leu Arg Lys Glu Thr Cys Asn Lys Ser Asn Met  
35 40 45  
Cys Glu Ser Ser Lys Glu Ala Leu Ala Glu Asn Asn Leu Asn Leu Pro  
50 55 60  
Lys Met Ala Glu Lys Asp Gly Cys Phe Gln Ser Gly Phe Asn Glu Glu  
65 70 75 80  
Thr Cys Leu Val Lys Ile Ile Thr Gly Leu Leu Glu Phe Glu Val Tyr  
85 90 95  
Leu Glu Tyr Leu Gln Asn Arg Phe Glu Ser Ser Glu Glu Gln Ala Arg  
100 105 110  
Ala Val Gln Met Ser Thr Lys Val Leu Ile Gln Phe Leu Gln Lys Lys  
115 120 125  
Ala Lys Asn Leu Asp Ala Ile Thr Thr Pro Asp Pro Thr Thr Asn Ala  
130 135 140  
Ser Leu Leu Thr Lys Leu Gln Ala Gln Asn Gln Trp Leu Gln Asp Met  
145 150 155 160  
Thr Thr His Leu Ile Leu Arg Ser Phe Lys Glu Phe Leu Gln Ser Ser  
165 170 175  
Leu Arg Ala Leu His Gln Met

<210> 940  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 940

Ala	Pro	Pro	Arg	Leu	Ile	Cys	Asp	Ser	Arg	Val	Leu	Glu	Arg	Tyr	Leu
1				5					10					15	
Leu	Glu	Ala	Lys	Glu	Ala	Glu	Asn	Ile	Thr	Thr	Gly	Cys	Ala	Glu	His
			20				25						30		
Cys	Ser	Leu	Asn	Glu	Asn	Ile	Thr	Val	Pro	Gln	Thr	Lys	Val	Asn	Phe
	35					40						45			
Tyr	Ala	Trp	Lys	Arg	Met	Glu	Val	Gly	Gln	Gln	Ala	Val	Glu	Val	Trp
	50				55						60				
Gln	Gly	Leu	Ala	Leu	Leu	Ser	Glu	Ala	Val	Leu	Arg	Gly	Gln	Ala	Leu
65				70					75					80	
Leu	Val	Asn	Ser	Ser	Gln	Pro	Trp	Glu	Pro	Leu	Gln	Leu	His	Val	Asp
			85					90						95	
Lys	Ala	Val	Ser	Gly	Leu	Arg	Ser	Leu	Thr	Thr	Leu	Leu	Arg	Ala	Leu
			100					105					110		
Gly	Ala	Gln	Lys	Glu	Ala	Ile	Ser	Pro	Pro	Asp	Ala	Ala	Ser	Ala	Ala
	115						120					125			
Pro	Leu	Arg	Thr	Ile	Thr	Ala	Asp	Thr	Phe	Arg	Lys	Leu	Phe	Arg	Val
	130				135						140				
Tyr	Ser	Asn	Phe	Leu	Arg	Gly	Lys	Leu	Lys	Leu	Tyr	Thr	Gly	Glu	Ala
145				150					155						160
Cys	Arg	Thr	Gly	Asp	Arg										
				165											

<210> 941  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 941

Ala	Pro	Pro	Arg	Leu	Ile	Cys	Asp	Ser	Arg	Val	Leu	Glu	Arg	Tyr	Leu
1				5					10					15	
Leu	Glu	Ala	Lys	Glu	Ala	Glu	Asn	Ile	Thr	Thr	Gly	Cys	Ala	Glu	His
			20				25						30		
Cys	Ser	Leu	Asn	Glu	Asn	Ile	Thr	Val	Pro	Asn	Thr	Lys	Val	Asn	Phe
	35					40						45			
Tyr	Ala	Trp	Lys	Arg	Met	Glu	Val	Gly	Gln	Gln	Ala	Val	Glu	Val	Trp
	50				55						60				
Gln	Gly	Leu	Ala	Leu	Leu	Ser	Glu	Ala	Val	Leu	Arg	Gly	Gln	Ala	Leu
65				70					75					80	
Leu	Val	Asn	Ser	Ser	Gln	Pro	Trp	Glu	Pro	Leu	Gln	Leu	His	Val	Asp
			85					90						95	
Lys	Ala	Val	Ser	Gly	Leu	Arg	Ser	Leu	Thr	Thr	Leu	Leu	Arg	Ala	Leu
			100					105					110		
Gly	Ala	Gln	Lys	Glu	Ala	Ile	Ser	Pro	Pro	Asp	Ala	Ala	Ser	Ala	Ala
	115						120					125			
Pro	Leu	Arg	Thr	Ile	Thr	Ala	Asp	Thr	Phe	Arg	Lys	Leu	Phe	Arg	Val
	130				135						140				
Tyr	Ser	Asn	Phe	Leu	Arg	Gly	Lys	Leu	Lys	Leu	Tyr	Thr	Gly	Glu	Ala
145				150					155						160
Cys	Arg	Thr	Gly	Asp	Arg										
				165											

<210> 942  
 <211> 166  
 <212> PRT

<213> Homo sapiens

<400> 942

```
Ala Pro Pro Arg Leu Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu
 1          5          10          15
Leu Glu Ala Lys Glu Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His
 20          25          30
Cys Ser Leu Asn Glu Asn Ile Thr Val Pro Asp Thr Gln Val Asn Phe
 35          40          45
Tyr Ala Trp Lys Arg Met Glu Val Gly Gln Gln Ala Val Glu Val Trp
 50          55          60
Gln Gly Leu Ala Leu Leu Ser Glu Ala Val Leu Arg Gly Gln Ala Leu
 65          70          75          80
Leu Val Asn Ser Ser Gln Pro Trp Glu Pro Leu Gln Leu His Val Asp
 85          90          95
Lys Ala Val Ser Gly Leu Arg Ser Leu Thr Thr Leu Leu Arg Ala Leu
100          105          110
Gly Ala Gln Lys Glu Ala Ile Ser Pro Pro Asp Ala Ala Ser Ala Ala
115          120          125
Pro Leu Arg Thr Ile Thr Ala Asp Thr Phe Arg Lys Leu Phe Arg Val
130          135          140
Tyr Ser Asn Phe Leu Arg Gly Lys Leu Lys Leu Tyr Thr Gly Glu Ala
145          150          155          160
Cys Arg Thr Gly Asp Arg
165
```

<210> 943

<211> 166

<212> PRT

<213> Homo sapiens

<400> 943

```
Ala Pro Pro Arg Leu Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu
 1          5          10          15
Leu Glu Ala Lys Glu Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His
 20          25          30
Cys Ser Leu Asn Glu Asn Ile Thr Val Pro Asp Thr Asn Val Asn Phe
 35          40          45
Tyr Ala Trp Lys Arg Met Glu Val Gly Gln Gln Ala Val Glu Val Trp
 50          55          60
Gln Gly Leu Ala Leu Leu Ser Glu Ala Val Leu Arg Gly Gln Ala Leu
 65          70          75          80
Leu Val Asn Ser Ser Gln Pro Trp Glu Pro Leu Gln Leu His Val Asp
 85          90          95
Lys Ala Val Ser Gly Leu Arg Ser Leu Thr Thr Leu Leu Arg Ala Leu
100          105          110
Gly Ala Gln Lys Glu Ala Ile Ser Pro Pro Asp Ala Ala Ser Ala Ala
115          120          125
Pro Leu Arg Thr Ile Thr Ala Asp Thr Phe Arg Lys Leu Phe Arg Val
130          135          140
Tyr Ser Asn Phe Leu Arg Gly Lys Leu Lys Leu Tyr Thr Gly Glu Ala
145          150          155          160
Cys Arg Thr Gly Asp Arg
165
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<210> 944

<211> 166

<212> PRT

<213> Homo sapiens

<400> 944

```
Ala Pro Pro Arg Leu Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu
 1          5          10          15
```

Leu Glu Ala Lys Glu Ala Glu Asn Ile Thr Thr Gly Cys Ala Val His  
 20 25 30  
 Cys Ser Leu Asn Glu Asn Ile Thr Val Pro Asp Thr Lys Val Asn Ile  
 35 40 45  
 Tyr Ala Trp Lys Arg Met Glu Val Gly Gln Gln Ala Val Glu Val Trp  
 50 55 60  
 Gln Gly Leu Ala Leu Leu Ser Glu Ala Val Leu Arg Gly Gln Ala Leu  
 65 70 75 80  
 Leu Val Asn Ser Ser Gln Pro Trp Glu Pro Leu Gln Leu His Val Asp  
 85 90 95  
 Lys Ala Val Ser Gly Leu Arg Ser Leu Thr Thr Leu Leu Arg Ala Leu  
 100 105 110  
 Gly Ala Gln Lys Glu Ala Ile Ser Pro Pro Asp Ala Ala Ser Ala Ala  
 115 120 125  
 Pro Leu Arg Thr Ile Thr Ala Asp Thr Phe Arg Lys Leu Phe Arg Val  
 130 135 140  
 Tyr Ser Asn Phe Leu Arg Gly Lys Leu Lys Leu Tyr Thr Gly Glu Ala  
 145 150 155 160  
 Cys Arg Thr Gly Asp Arg  
 165

<210> 945

<211> 166

<212> PRT

<213> Homo sapiens

<400> 945

Ala Pro Pro Arg Leu Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu  
 1 5 10 15  
 Leu Glu Ala Lys Glu Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His  
 20 25 30  
 Cys Ser Leu Asn Glu Asn Ile Thr Val Pro Asp Thr Lys Val Asn Val  
 35 40 45  
 Tyr Ala Trp Lys Arg Met Glu Val Gly Gln Gln Ala Val Glu Val Trp  
 50 55 60  
 Gln Gly Leu Ala Leu Leu Ser Glu Ala Val Leu Arg Gly Gln Ala Leu  
 65 70 75 80  
 Leu Val Asn Ser Ser Gln Pro Trp Glu Pro Leu Gln Leu His Val Asp  
 85 90 95  
 Lys Ala Val Ser Gly Leu Arg Ser Leu Thr Thr Leu Leu Arg Ala Leu  
 100 105 110  
 Gly Ala Gln Lys Glu Ala Ile Ser Pro Pro Asp Ala Ala Ser Ala Ala  
 115 120 125  
 Pro Leu Arg Thr Ile Thr Ala Asp Thr Phe Arg Lys Leu Phe Arg Val  
 130 135 140  
 Tyr Ser Asn Phe Leu Arg Gly Lys Leu Lys Leu Tyr Thr Gly Glu Ala  
 145 150 155 160  
 Cys Arg Thr Gly Asp Arg  
 165

<210> 946

<211> 166

<212> PRT

<213> Homo sapiens

<400> 946

Ala Pro Pro Arg Leu Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu  
 1 5 10 15  
 Leu Glu Ala Lys Glu Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His  
 20 25 30  
 Cys Ser Leu Asn Glu Asn Ile Thr Val Pro Asp Thr Lys Val Asn Phe  
 35 40 45  
 His Ala Trp Lys Arg Met Glu Val Gly Gln Gln Ala Val Glu Val Trp

50		55		60
Gln Gly Leu Ala Leu	Leu Ser Glu Ala Val	Leu Arg Gly Gln Ala Leu		
65	70	75	80	
Leu Val Asn Ser Ser	Gln Pro Trp Glu Pro	Leu Gln Leu His Val Asp		
	85	90	95	
Lys Ala Val Ser Gly	Leu Arg Ser Leu Thr Thr	Leu Leu Arg Ala Leu		
	100	105	110	
Gly Ala Gln Lys Glu	Ala Ile Ser Pro Pro	Asp Ala Ala Ser Ala Ala		
	115	120	125	
Pro Leu Arg Thr Ile	Thr Ala Asp Thr Phe	Arg Lys Leu Phe Arg Val		
	130	135	140	
Tyr Ser Asn Phe Leu	Arg Gly Lys Leu Lys	Leu Tyr Thr Gly Glu Ala		
145	150	155	160	
Cys Arg Thr Gly Asp	Arg			
	165			

<210> 947  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 947
Ala Pro Pro Arg Leu Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu
1 5 10 15
Leu Glu Ala Lys Glu Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His
20 25 30
Cys Ser Leu Asn Glu Asn Ile Thr Val Pro Asp Thr Lys Val Asn Phe
35 40 45
Ile Ala Trp Lys Arg Met Glu Val Gly Gln Gln Ala Val Glu Val Trp
50 55 60
Gln Gly Leu Ala Leu Leu Ser Glu Ala Val Leu Arg Gly Gln Ala Leu
65 70 75 80
Leu Val Asn Ser Ser Gln Pro Trp Glu Pro Leu Gln Leu His Val Asp
85 90 95
Lys Ala Val Ser Gly Leu Arg Ser Leu Thr Thr Leu Leu Arg Ala Leu
100 105 110
Gly Ala Gln Lys Glu Ala Ile Ser Pro Pro Asp Ala Ala Ser Ala Ala
115 120 125
Pro Leu Arg Thr Ile Thr Ala Asp Thr Phe Arg Lys Leu Phe Arg Val
130 135 140
Tyr Ser Asn Phe Leu Arg Gly Lys Leu Lys Leu Tyr Thr Gly Glu Ala
145 150 155 160
Cys Arg Thr Gly Asp Arg
165

<210> 948  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 948
Ala Pro Pro Arg Leu Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu
1 5 10 15
Leu Glu Ala Lys Glu Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His
20 25 30
Cys Ser Leu Asn Glu Asn Ile Thr Val Pro Asp Thr Lys Val Asn Phe
35 40 45
Tyr Ala Trp Gln Arg Met Glu Val Gly Gln Gln Ala Val Glu Val Trp
50 55 60
Gln Gly Leu Ala Leu Leu Ser Glu Ala Val Leu Arg Gly Gln Ala Leu
65 70 75 80
Leu Val Asn Ser Ser Gln Pro Trp Glu Pro Leu Gln Leu His Val Asp
85 90 95

Lys Ala Val Ser Gly Leu Arg Ser Leu Thr Thr Leu Leu Arg Ala Leu  
                   100                  105                  110  
 Gly Ala Gln Lys Glu Ala Ile Ser Pro Pro Asp Ala Ala Ser Ala Ala  
                   115                  120                  125  
 Pro Leu Arg Thr Ile Thr Ala Asp Thr Phe Arg Lys Leu Phe Arg Val  
                   130                  135                  140  
 Tyr Ser Asn Phe Leu Arg Gly Lys Leu Lys Leu Tyr Thr Gly Glu Ala  
 145                  150                  155                  160  
 Cys Arg Thr Gly Asp Arg  
                   165

<210> 949  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 949  
 Ala Pro Pro Arg Leu Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu  
   1                  5                  10                  15  
 Leu Glu Ala Lys Glu Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His  
                   20                  25                  30  
 Cys Ser Leu Asn Glu Asn Ile Thr Val Pro Asp Thr Lys Val Asn Phe  
                   35                  40                  45  
 Tyr Ala Trp Asn Arg Met Glu Val Gly Gln Gln Ala Val Glu Val Trp  
                   50                  55                  60  
 Gln Gly Leu Ala Leu Leu Ser Glu Ala Val Leu Arg Gly Gln Ala Leu  
 65                  70                  75                  80  
 Leu Val Asn Ser Ser Gln Pro Trp Glu Pro Leu Gln Leu His Val Asp  
                   85                  90                  95  
 Lys Ala Val Ser Gly Leu Arg Ser Leu Thr Thr Leu Leu Arg Ala Leu  
                   100                  105                  110  
 Gly Ala Gln Lys Glu Ala Ile Ser Pro Pro Asp Ala Ala Ser Ala Ala  
                   115                  120                  125  
 Pro Leu Arg Thr Ile Thr Ala Asp Thr Phe Arg Lys Leu Phe Arg Val  
                   130                  135                  140  
 Tyr Ser Asn Phe Leu Arg Gly Lys Leu Lys Leu Tyr Thr Gly Glu Ala  
 145                  150                  155                  160  
 Cys Arg Thr Gly Asp Arg  
                   165

<210> 950  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 950  
 Ala Pro Pro Arg Leu Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu  
   1                  5                  10                  15  
 Leu Glu Ala Lys Glu Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His  
                   20                  25                  30  
 Cys Ser Leu Asn Glu Asn Ile Thr Val Pro Asp Thr Lys Val Asn Phe  
                   35                  40                  45  
 Tyr Ala Trp Lys His Met Glu Val Gly Gln Gln Ala Val Glu Val Trp  
                   50                  55                  60  
 Gln Gly Leu Ala Leu Leu Ser Glu Ala Val Leu Arg Gly Gln Ala Leu  
 65                  70                  75                  80  
 Leu Val Asn Ser Ser Gln Pro Trp Glu Pro Leu Gln Leu His Val Asp  
                   85                  90                  95  
 Lys Ala Val Ser Gly Leu Arg Ser Leu Thr Thr Leu Leu Arg Ala Leu  
                   100                  105                  110  
 Gly Ala Gln Lys Glu Ala Ile Ser Pro Pro Asp Ala Ala Ser Ala Ala  
                   115                  120                  125  
 Pro Leu Arg Thr Ile Thr Ala Asp Thr Phe Arg Lys Leu Phe Arg Val



130  
 Tyr Ser Asn Phe Leu Arg Gly Lys Leu Lys Leu Tyr Thr Gly Glu Ala  
 145 150 155 160  
 Cys Arg Thr Gly Asp Arg  
 165

<210> 951  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 951  
 Ala Pro Pro Arg Leu Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu  
 1 5 10 15  
 Leu Glu Ala Lys Glu Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His  
 20 25 30  
 Cys Ser Leu Asn Glu Asn Ile Thr Val Pro Asp Thr Lys Val Asn Phe  
 35 40 45  
 Tyr Ala Trp Lys Gln Met Glu Val Gly Gln Gln Ala Val Glu Val Trp  
 50 55 60  
 Gln Gly Leu Ala Leu Leu Ser Glu Ala Val Leu Arg Gly Gln Ala Leu  
 65 70 75 80  
 Leu Val Asn Ser Ser Gln Pro Trp Glu Pro Leu Gln Leu His Val Asp  
 85 90 95  
 Lys Ala Val Ser Gly Leu Arg Ser Leu Thr Thr Leu Leu Arg Ala Leu  
 100 105 110  
 Gly Ala Gln Lys Glu Ala Ile Ser Pro Pro Asp Ala Ala Ser Ala Ala  
 115 120 125  
 Pro Leu Arg Thr Ile Thr Ala Asp Thr Phe Arg Lys Leu Phe Arg Val  
 130 135 140  
 Tyr Ser Asn Phe Leu Arg Gly Lys Leu Lys Leu Tyr Thr Gly Glu Ala  
 145 150 155 160  
 Cys Arg Thr Gly Asp Arg  
 165

<210> 952  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 952  
 Ala Pro Pro Arg Leu Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu  
 1 5 10 15  
 Leu Glu Ala Lys Glu Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His  
 20 25 30  
 Cys Ser Leu Asn Glu Asn Ile Thr Val Pro Asp Thr Lys Val Asn Phe  
 35 40 45  
 Tyr Ala Trp Lys Arg Met Gln Val Gly Gln Gln Ala Val Glu Val Trp  
 50 55 60  
 Gln Gly Leu Ala Leu Leu Ser Glu Ala Val Leu Arg Gly Gln Ala Leu  
 65 70 75 80  
 Leu Val Asn Ser Ser Gln Pro Trp Glu Pro Leu Gln Leu His Val Asp  
 85 90 95  
 Lys Ala Val Ser Gly Leu Arg Ser Leu Thr Thr Leu Leu Arg Ala Leu  
 100 105 110  
 Gly Ala Gln Lys Glu Ala Ile Ser Pro Pro Asp Ala Ala Ser Ala Ala  
 115 120 125  
 Pro Leu Arg Thr Ile Thr Ala Asp Thr Phe Arg Lys Leu Phe Arg Val  
 130 135 140  
 Tyr Ser Asn Phe Leu Arg Gly Lys Leu Lys Leu Tyr Thr Gly Glu Ala  
 145 150 155 160  
 Cys Arg Thr Gly Asp Arg  
 165

<210> 953  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 953  
 Ala Pro Pro Arg Leu Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu  
 1 5 10 15  
 Leu Glu Ala Lys Glu Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His  
 20 25 30  
 Cys Ser Leu Asn Glu Asn Ile Thr Val Pro Asp Thr Lys Val Asn Phe  
 35 40 45  
 Tyr Ala Trp Lys Arg Met Asn Val Gly Gln Gln Ala Val Glu Val Trp  
 50 55 60  
 Gln Gly Leu Ala Leu Leu Ser Glu Ala Val Leu Arg Gly Gln Ala Leu  
 65 70 75 80  
 Leu Val Asn Ser Ser Gln Pro Trp Glu Pro Leu Gln Leu His Val Asp  
 85 90 95  
 Lys Ala Val Ser Gly Leu Arg Ser Leu Thr Thr Leu Leu Arg Ala Leu  
 100 105 110  
 Gly Ala Gln Lys Glu Ala Ile Ser Pro Pro Asp Ala Ala Ser Ala Ala  
 115 120 125  
 Pro Leu Arg Thr Ile Thr Ala Asp Thr Phe Arg Lys Leu Phe Arg Val  
 130 135 140  
 Tyr Ser Asn Phe Leu Arg Gly Lys Leu Lys Leu Tyr Thr Gly Glu Ala  
 145 150 155 160  
 Cys Arg Thr Gly Asp Arg  
 165

<210> 954  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 954  
 Ala Pro Pro Arg Leu Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu  
 1 5 10 15  
 Leu Glu Ala Lys Glu Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His  
 20 25 30  
 Cys Ser Leu Asn Glu Asn Ile Thr Val Pro Asp Thr Lys Val Asn Phe  
 35 40 45  
 Tyr Ala Trp Lys Arg Met His Val Gly Gln Gln Ala Val Glu Val Trp  
 50 55 60  
 Gln Gly Leu Ala Leu Leu Ser Glu Ala Val Leu Arg Gly Gln Ala Leu  
 65 70 75 80  
 Leu Val Asn Ser Ser Gln Pro Trp Glu Pro Leu Gln Leu His Val Asp  
 85 90 95  
 Lys Ala Val Ser Gly Leu Arg Ser Leu Thr Thr Leu Leu Arg Ala Leu  
 100 105 110  
 Gly Ala Gln Lys Glu Ala Ile Ser Pro Pro Asp Ala Ala Ser Ala Ala  
 115 120 125  
 Pro Leu Arg Thr Ile Thr Ala Asp Thr Phe Arg Lys Leu Phe Arg Val  
 130 135 140  
 Tyr Ser Asn Phe Leu Arg Gly Lys Leu Lys Leu Tyr Thr Gly Glu Ala  
 145 150 155 160  
 Cys Arg Thr Gly Asp Arg  
 165

<210> 955  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 955

Ala	Pro	Pro	Arg	Leu	Ile	Cys	Asp	Ser	Arg	Val	Leu	Glu	Arg	Tyr	Leu
1				5					10					15	
Leu	Glu	Ala	Lys	Glu	Ala	Glu	Asn	Ile	Thr	Thr	Gly	Cys	Ala	Glu	His
			20				25						30		
Cys	Ser	Leu	Asn	Glu	Asn	Ile	Thr	Val	Pro	Asp	Thr	Lys	Val	Asn	Phe
		35				40						45			
Tyr	Ala	Trp	Lys	Arg	Met	Glu	Val	Gly	Gln	Gln	Ala	Val	Glu	Val	Trp
	50					55					60				
Gln	Gly	Leu	Ala	Leu	Leu	Ser	Gln	Ala	Val	Leu	Arg	Gly	Gln	Ala	Leu
65					70					75					80
Leu	Val	Asn	Ser	Ser	Gln	Pro	Trp	Glu	Pro	Leu	Gln	Leu	His	Val	Asp
			85						90					95	
Lys	Ala	Val	Ser	Gly	Leu	Arg	Ser	Leu	Thr	Thr	Leu	Leu	Arg	Ala	Leu
			100					105					110		
Gly	Ala	Gln	Lys	Glu	Ala	Ile	Ser	Pro	Pro	Asp	Ala	Ala	Ser	Ala	Ala
		115					120					125			
Pro	Leu	Arg	Thr	Ile	Thr	Ala	Asp	Thr	Phe	Arg	Lys	Leu	Phe	Arg	Val
	130					135					140				
Tyr	Ser	Asn	Phe	Leu	Arg	Gly	Lys	Leu	Lys	Leu	Tyr	Thr	Gly	Glu	Ala
145				150						155					160
Cys	Arg	Thr	Gly	Asp	Arg										
					165										

<210> 956

<211> 166

<212> PRT

<213> Homo sapiens

<400> 956

Ala	Pro	Pro	Arg	Leu	Ile	Cys	Asp	Ser	Arg	Val	Leu	Glu	Arg	Tyr	Leu
1				5					10					15	
Leu	Glu	Ala	Lys	Glu	Ala	Glu	Asn	Ile	Thr	Thr	Gly	Cys	Ala	Glu	His
			20				25						30		
Cys	Ser	Leu	Asn	Glu	Asn	Ile	Thr	Val	Pro	Asp	Thr	Lys	Val	Asn	Phe
		35				40						45			
Tyr	Ala	Trp	Lys	Arg	Met	Glu	Val	Gly	Gln	Gln	Ala	Val	Glu	Val	Trp
	50					55					60				
Gln	Gly	Leu	Ala	Leu	Leu	Ser	Asn	Ala	Val	Leu	Arg	Gly	Gln	Ala	Leu
65					70					75					80
Leu	Val	Asn	Ser	Ser	Gln	Pro	Trp	Glu	Pro	Leu	Gln	Leu	His	Val	Asp
			85						90					95	
Lys	Ala	Val	Ser	Gly	Leu	Arg	Ser	Leu	Thr	Thr	Leu	Leu	Arg	Ala	Leu
			100					105					110		
Gly	Ala	Gln	Lys	Glu	Ala	Ile	Ser	Pro	Pro	Asp	Ala	Ala	Ser	Ala	Ala
		115					120					125			
Pro	Leu	Arg	Thr	Ile	Thr	Ala	Asp	Thr	Phe	Arg	Lys	Leu	Phe	Arg	Val
	130					135					140				
Tyr	Ser	Asn	Phe	Leu	Arg	Gly	Lys	Leu	Lys	Leu	Tyr	Thr	Gly	Glu	Ala
145				150						155					160
Cys	Arg	Thr	Gly	Asp	Arg										
					165										

<210> 957

<211> 166

<212> PRT

<213> Homo sapiens

<400> 957

Ala	Pro	Pro	Arg	Leu	Ile	Cys	Asp	Ser	Arg	Val	Leu	Glu	Arg	Tyr	Leu
1				5					10					15	
Leu	Glu	Ala	Lys	Glu	Ala	Glu	Asn	Ile	Thr	Thr	Gly	Cys	Ala	Glu	His



Gln Gly Leu Ala Leu Ser Glu Ala Val Ile Arg Gly Gln Leu  
 65 70 75 80  
 Leu Val Asn Ser Ser Gln Pro Trp Glu Pro Leu Gln Leu His Val Asp  
 85 90 95  
 Lys Ala Val Ser Gly Leu Arg Ser Leu Thr Thr Leu Leu Arg Ala Leu  
 100 105 110  
 Gly Ala Gln Lys Glu Ala Ile Ser Pro Pro Asp Ala Ala Ser Ala Ala  
 115 120 125  
 Pro Leu Arg Thr Ile Thr Ala Asp Thr Phe Arg Lys Leu Phe Arg Val  
 130 135 140  
 Tyr Ser Asn Phe Leu Arg Gly Lys Leu Lys Leu Tyr Thr Gly Glu Ala  
 145 150 155 160  
 Cys Arg Thr Gly Asp Arg  
 165

<210> 960  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 960  
 Ala Pro Pro Arg Leu Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu  
 1 5 10 15  
 Leu Glu Ala Lys Glu Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His  
 20 25 30  
 Cys Ser Leu Asn Glu Asn Ile Thr Val Pro Asp Thr Lys Val Asn Phe  
 35 40 45  
 Tyr Ala Trp Lys Arg Met Glu Val Gly Gln Gln Ala Val Glu Val Trp  
 50 55 60  
 Gln Gly Leu Ala Leu Leu Ser Glu Ala Val Leu His Gly Gln Ala Leu  
 65 70 75 80  
 Leu Val Asn Ser Ser Gln Pro Trp Glu Pro Leu Gln Leu His Val Asp  
 85 90 95  
 Lys Ala Val Ser Gly Leu Arg Ser Leu Thr Thr Leu Leu Arg Ala Leu  
 100 105 110  
 Gly Ala Gln Lys Glu Ala Ile Ser Pro Pro Asp Ala Ala Ser Ala Ala  
 115 120 125  
 Pro Leu Arg Thr Ile Thr Ala Asp Thr Phe Arg Lys Leu Phe Arg Val  
 130 135 140  
 Tyr Ser Asn Phe Leu Arg Gly Lys Leu Lys Leu Tyr Thr Gly Glu Ala  
 145 150 155 160  
 Cys Arg Thr Gly Asp Arg  
 165

<210> 961  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 961  
 Ala Pro Pro Arg Leu Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu  
 1 5 10 15  
 Leu Glu Ala Lys Glu Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His  
 20 25 30  
 Cys Ser Leu Asn Glu Asn Ile Thr Val Pro Asp Thr Lys Val Asn Phe  
 35 40 45  
 Tyr Ala Trp Lys Arg Met Glu Val Gly Gln Gln Ala Val Glu Val Trp  
 50 55 60  
 Gln Gly Leu Ala Leu Leu Ser Glu Ala Val Leu Gln Gly Gln Ala Leu  
 65 70 75 80  
 Leu Val Asn Ser Ser Gln Pro Trp Glu Pro Leu Gln Leu His Val Asp  
 85 90 95  
 Lys Ala Val Ser Gly Leu Arg Ser Leu Thr Thr Leu Leu Arg Ala Leu

[illegible]

<400>	962
Ala Pro Pro Arg Leu Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu	
1          5               10              15	
Leu Glu Ala Lys Glu Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His	
20              25              30	
Cys Ser Leu Asn Glu Asn Ile Thr Val Pro Asp Thr Lys Val Asn Phe	
35              40              45	
Tyr Ala Trp Lys Arg Met Glu Val Gly Gln Gln Ala Val Glu Val Trp	
50              55              60	
Gln Gly Leu Ala Leu Leu Ser Glu Ala Val Leu Arg Gly Gln Ala Leu	
65            70            75            80	
Leu Val Asn Ser Ser Gln Pro Trp Glu Pro Leu Gln Leu His Val Asp	
85            90            95	
Lys Ala Val Ser Gly Leu Arg Ser Leu Thr Thr Leu Leu Arg Ala Leu	
100           105           110	
Gly Ala Gln Lys Glu Ala Ile Ser Pro Pro Gln Ala Ala Ser Ala Ala	
115           120           125	
Pro Leu Arg Thr Ile Thr Ala Asp Thr Phe Arg Lys Leu Phe Arg Val	
130           135           140	
Tyr Ser Asn Phe Leu Arg Gly Lys Leu Lys Leu Tyr Thr Gly Glu Ala	
145            150            155            160	
Cys Arg Thr Gly Asp Arg	
165	

<400> 963																	
Ala	Pro	Pro	Arg	Leu	Ile	Cys	Asp	Ser	Arg	Val	Leu	Glu	Arg	Tyr	Leu		
1				5					10					15			
Leu	Glu	Ala		Lys	Glu	Ala	Glu	Asn	Ile	Thr	Thr	Gly	Cys	Ala	Glu	His	
			20					25						30			
Cys	Ser	Leu	Asn	Glu	Asn	Ile	Thr	Val	Pro	Asp	Thr	Lys	Val	Asn	Phe		
		35					40					45					
Tyr	Ala	Trp	Lys	Arg	Met	Glu	Val	Gly	Gln	Gln	Ala	Val	Glu	Val	Trp		
	50					55					60						
Gln	Gly	Leu	Ala	Leu	Leu	Ser	Glu	Ala	Val	Leu	Arg	Gly	Gln	Ala	Leu		
65				70						75					80		
Leu	Val	Asn	Ser	Ser	Gln	Pro	Trp	Glu	Pro	Leu	Gln	Leu	His	Val	Asp		
			85						90					95			
Lys	Ala	Val	Ser	Gly	Leu	Arg	Ser	Leu	Thr	Thr	Leu	Leu	Arg	Ala	Leu		
			100					105					110				
Gly	Ala	Gln	Lys	Glu	Ala	Ile	Ser	Pro	Pro	Asn	Ala	Ala	Ser	Ala	Ala		
		115					120					125					
Pro	Leu	Arg	Thr	Ile	Thr	Ala	Asp	Thr	Phe	Arg	Lys	Leu	Phe	Arg	Val		
	130					135					140						

Tyr Ser Asn Phe Leu Arg Gly Lys Leu Lys Leu Tyr Thr Gly Leu Ala  
 145 150 155 160  
 Cys Arg Thr Gly Asp Arg  
 165

<210> 964  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 964  
 Ala Pro Pro Arg Leu Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu  
 1 5 10 15  
 Leu Glu Ala Lys Glu Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His  
 20 25 30  
 Cys Ser Leu Asn Glu Asn Ile Thr Val Pro Asp Thr Lys Val Asn Phe  
 35 40 45  
 Tyr Ala Trp Lys Arg Met Glu Val Gly Gln Gln Ala Val Glu Val Trp  
 50 55 60  
 Gln Gly Leu Ala Leu Leu Ser Glu Ala Val Leu Arg Gly Gln Ala Leu  
 65 70 75 80  
 Leu Val Asn Ser Ser Gln Pro Trp Glu Pro Leu Gln Leu His Val Asp  
 85 90 95  
 Lys Ala Val Ser Gly Leu Arg Ser Leu Thr Thr Leu Leu Arg Ala Leu  
 100 105 110  
 Gly Ala Gln Lys Glu Ala Ile Ser Pro Pro Asp Ala Ala Ser Ala Ala  
 115 120 125  
 Ser Leu Arg Thr Ile Thr Ala Asp Thr Phe Arg Lys Leu Phe Arg Val  
 130 135 140  
 Tyr Ser Asn Phe Leu Arg Gly Lys Leu Lys Leu Tyr Thr Gly Glu Ala  
 145 150 155 160  
 Cys Arg Thr Gly Asp Arg  
 165

<210> 965  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 965  
 Ala Pro Pro Arg Leu Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu  
 1 5 10 15  
 Leu Glu Ala Lys Glu Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His  
 20 25 30  
 Cys Ser Leu Asn Glu Asn Ile Thr Val Pro Asp Thr Lys Val Asn Phe  
 35 40 45  
 Tyr Ala Trp Lys Arg Met Glu Val Gly Gln Gln Ala Val Glu Val Trp  
 50 55 60  
 Gln Gly Leu Ala Leu Leu Ser Glu Ala Val Leu Arg Gly Gln Ala Leu  
 65 70 75 80  
 Leu Val Asn Ser Ser Gln Pro Trp Glu Pro Leu Gln Leu His Val Asp  
 85 90 95  
 Lys Ala Val Ser Gly Leu Arg Ser Leu Thr Thr Leu Leu Arg Ala Leu  
 100 105 110  
 Gly Ala Gln Lys Glu Ala Ile Ser Pro Pro Asp Ala Ala Ser Ala Ala  
 115 120 125  
 Ala Leu Arg Thr Ile Thr Ala Asp Thr Phe Arg Lys Leu Phe Arg Val  
 130 135 140  
 Tyr Ser Asn Phe Leu Arg Gly Lys Leu Lys Leu Tyr Thr Gly Glu Ala  
 145 150 155 160  
 Cys Arg Thr Gly Asp Arg  
 165

<210> 966  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 966  
 Ala Pro Pro Arg Leu Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu  
 1 5 10 15  
 Leu Glu Ala Lys Glu Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His  
 20 25 30  
 Cys Ser Leu Asn Glu Asn Ile Thr Val Pro Asp Thr Lys Val Asn Phe  
 35 40 45  
 Tyr Ala Trp Lys Arg Met Glu Val Gly Gln Gln Ala Val Glu Val Trp  
 50 55 60  
 Gln Gly Leu Ala Leu Leu Ser Glu Ala Val Leu Arg Gly Gln Ala Leu  
 65 70 75 80  
 Leu Val Asn Ser Ser Gln Pro Trp Glu Pro Leu Gln Leu His Val Asp  
 85 90 95  
 Lys Ala Val Ser Gly Leu Arg Ser Leu Thr Thr Leu Leu Arg Ala Leu  
 100 105 110  
 Gly Ala Gln Lys Glu Ala Ile Ser Pro Pro Asp Ala Ala Ser Ala Ala  
 115 120 125  
 Pro Val Arg Thr Ile Thr Ala Asp Thr Phe Arg Lys Leu Phe Arg Val  
 130 135 140  
 Tyr Ser Asn Phe Leu Arg Gly Lys Leu Lys Leu Tyr Thr Gly Glu Ala  
 145 150 155 160  
 Cys Arg Thr Gly Asp Arg  
 165

<210> 967  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 967  
 Ala Pro Pro Arg Leu Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu  
 1 5 10 15  
 Leu Glu Ala Lys Glu Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His  
 20 25 30  
 Cys Ser Leu Asn Glu Asn Ile Thr Val Pro Asp Thr Lys Val Asn Phe  
 35 40 45  
 Tyr Ala Trp Lys Arg Met Glu Val Gly Gln Gln Ala Val Glu Val Trp  
 50 55 60  
 Gln Gly Leu Ala Leu Leu Ser Glu Ala Val Leu Arg Gly Gln Ala Leu  
 65 70 75 80  
 Leu Val Asn Ser Ser Gln Pro Trp Glu Pro Leu Gln Leu His Val Asp  
 85 90 95  
 Lys Ala Val Ser Gly Leu Arg Ser Leu Thr Thr Leu Leu Arg Ala Leu  
 100 105 110  
 Gly Ala Gln Lys Glu Ala Ile Ser Pro Pro Asp Ala Ala Ser Ala Ala  
 115 120 125  
 Pro Ile Arg Thr Ile Thr Ala Asp Thr Phe Arg Lys Leu Phe Arg Val  
 130 135 140  
 Tyr Ser Asn Phe Leu Arg Gly Lys Leu Lys Leu Tyr Thr Gly Glu Ala  
 145 150 155 160  
 Cys Arg Thr Gly Asp Arg  
 165

<210> 968  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens



<400> 968

Ala	Pro	Pro	Arg	Leu	Ile	Cys	Asp	Ser	Arg	Val	Leu	Glu	Arg	Tyr	Leu
1				5					10					15	
Leu	Glu	Ala	Lys	Glu	Ala	Glu	Asn	Ile	Thr	Thr	Gly	Cys	Ala	Glu	His
			20					25					30		
Cys	Ser	Leu	Asn	Glu	Asn	Ile	Thr	Val	Pro	Asp	Thr	Lys	Val	Asn	Phe
			35				40					45			
Tyr	Ala	Trp	Lys	Arg	Met	Glu	Val	Gly	Gln	Gln	Ala	Val	Glu	Val	Trp
			50			55					60				
Gln	Gly	Leu	Ala	Leu	Leu	Ser	Glu	Ala	Val	Leu	Arg	Gly	Gln	Ala	Leu
65					70					75				80	
Leu	Val	Asn	Ser	Ser	Gln	Pro	Trp	Glu	Pro	Leu	Gln	Leu	His	Val	Asp
				85					90					95	
Lys	Ala	Val	Ser	Gly	Leu	Arg	Ser	Leu	Thr	Thr	Leu	Leu	Arg	Ala	Leu
			100					105					110		
Gly	Ala	Gln	Lys	Glu	Ala	Ile	Ser	Pro	Pro	Asp	Ala	Ala	Ser	Ala	Ala
			115				120					125			
Pro	Leu	His	Thr	Ile	Thr	Ala	Asp	Thr	Phe	Arg	Lys	Leu	Phe	Arg	Val
			130			135					140				
Tyr	Ser	Asn	Phe	Leu	Arg	Gly	Lys	Leu	Lys	Leu	Tyr	Thr	Gly	Glu	Ala
145				150						155					160
Cys	Arg	Thr	Gly	Asp	Arg										
					165										

<210> 969

<211> 166

<212> PRT

<213> Homo sapiens

<400> 969

Ala	Pro	Pro	Arg	Leu	Ile	Cys	Asp	Ser	Arg	Val	Leu	Glu	Arg	Tyr	Leu
1				5					10					15	
Leu	Glu	Ala	Lys	Glu	Ala	Glu	Asn	Ile	Thr	Thr	Gly	Cys	Ala	Glu	His
			20					25					30		
Cys	Ser	Leu	Asn	Glu	Asn	Ile	Thr	Val	Pro	Asp	Thr	Lys	Val	Asn	Phe
			35				40					45			
Tyr	Ala	Trp	Lys	Arg	Met	Glu	Val	Gly	Gln	Gln	Ala	Val	Glu	Val	Trp
			50			55					60				
Gln	Gly	Leu	Ala	Leu	Leu	Ser	Glu	Ala	Val	Leu	Arg	Gly	Gln	Ala	Leu
65					70					75				80	
Leu	Val	Asn	Ser	Ser	Gln	Pro	Trp	Glu	Pro	Leu	Gln	Leu	His	Val	Asp
				85					90					95	
Lys	Ala	Val	Ser	Gly	Leu	Arg	Ser	Leu	Thr	Thr	Leu	Leu	Arg	Ala	Leu
			100					105					110		
Gly	Ala	Gln	Lys	Glu	Ala	Ile	Ser	Pro	Pro	Asp	Ala	Ala	Ser	Ala	Ala
			115				120					125			
Pro	Leu	Gln	Thr	Ile	Thr	Ala	Asp	Thr	Phe	Arg	Lys	Leu	Phe	Arg	Val
			130			135					140				
Tyr	Ser	Asn	Phe	Leu	Arg	Gly	Lys	Leu	Lys	Leu	Tyr	Thr	Gly	Glu	Ala
145				150						155					160
Cys	Arg	Thr	Gly	Asp	Arg										
					165										

<210> 970

<211> 166

<212> PRT

<213> Homo sapiens

<400> 970

Ala	Pro	Pro	Arg	Leu	Ile	Cys	Asp	Ser	Arg	Val	Leu	Glu	Arg	Tyr	Leu
1				5					10					15	
Leu	Glu	Ala	Lys	Glu	Ala	Glu	Asn	Ile	Thr	Thr	Gly	Cys	Ala	Glu	His
			20					25					30		

Cys	Ser	Leu	Asn	Glu	Asn	Ile	Thr	Val	Pro	Asp	Thr	Lys	Val	Asn	Phe
		35					40					45			
Tyr	Ala	Trp	Lys	Arg	Met	Glu	Val	Gly	Gln	Gln	Ala	Val	Glu	Val	Trp
		50				55					60				
Gln	Gly	Leu	Ala	Leu	Leu	Ser	Glu	Ala	Val	Leu	Arg	Gly	Gln	Ala	Leu
65					70					75					80
Leu	Val	Asn	Ser	Ser	Gln	Pro	Trp	Glu	Pro	Leu	Gln	Leu	His	Val	Asp
			85						90					95	
Lys	Ala	Val	Ser	Gly	Leu	Arg	Ser	Leu	Thr	Thr	Leu	Leu	Arg	Ala	Leu
			100					105					110		
Gly	Ala	Gln	Lys	Glu	Ala	Ile	Ser	Pro	Pro	Asp	Ala	Ala	Ser	Ala	Ala
		115					120					125			
Pro	Leu	Arg	Thr	Ile	Thr	Ala	Asp	Thr	Phe	Arg	Lys	Leu	Phe	Arg	Val
	130					135					140				
Tyr	Ser	Asn	Phe	Leu	Arg	Gly	Lys	Leu	Lys	Leu	Tyr	Thr	Gly	Glu	Ala
145					150					155					160
Cys	His	Thr	Gly	Asp	Arg										
				165											

<210> 971  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Ala	Pro	Pro	Arg	Leu	Ile	Cys	Asp	Ser	Arg	Val	Leu	Glu	Arg	Tyr	Leu
1				5					10					15	
Leu	Glu	Ala	Lys	Glu	Ala	Glu	Asn	Ile	Thr	Thr	Gly	Cys	Ala	Glu	His
			20				25						30		
Cys	Ser	Leu	Asn	Glu	Asn	Ile	Thr	Val	Pro	Asp	Thr	Lys	Val	Asn	Phe
		35				40						45			
Tyr	Ala	Trp	Lys	Arg	Met	Glu	Val	Gly	Gln	Gln	Ala	Val	Glu	Val	Trp
		50				55					60				
Gln	Gly	Leu	Ala	Leu	Leu	Ser	Glu	Ala	Val	Leu	Arg	Gly	Gln	Ala	Leu
65					70					75					80
Leu	Val	Asn	Ser	Ser	Gln	Pro	Trp	Glu	Pro	Leu	Gln	Leu	His	Val	Asp
			85						90					95	
Lys	Ala	Val	Ser	Gly	Leu	Arg	Ser	Leu	Thr	Thr	Leu	Leu	Arg	Ala	Leu
			100					105					110		
Gly	Ala	Gln	Lys	Glu	Ala	Ile	Ser	Pro	Pro	Asp	Ala	Ala	Ser	Ala	Ala
		115					120					125			
Pro	Leu	Arg	Thr	Ile	Thr	Ala	Asp	Thr	Phe	Arg	Lys	Leu	Phe	Arg	Val
	130					135					140				
Tyr	Ser	Asn	Phe	Leu	Arg	Gly	Lys	Leu	Lys	Leu	Tyr	Thr	Gly	Glu	Ala
145					150					155					160
Cys	Gln	Thr	Gly	Asp	Arg										
				165											

<210> 972  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Ala	Pro	Pro	Arg	Leu	Ile	Cys	Asp	Ser	Arg	Val	Leu	Glu	Arg	Tyr	Leu
1				5					10					15	
Leu	Glu	Ala	Lys	Glu	Ala	Glu	Asn	Ile	Thr	Thr	Gly	Cys	Ala	Glu	His
			20				25						30		
Cys	Ser	Leu	Asn	Glu	Asn	Ile	Thr	Val	Pro	Asp	Thr	Lys	Val	Asn	Phe
		35				40						45			
Tyr	Ala	Trp	Lys	Arg	Met	Glu	Val	Gly	Gln	Gln	Ala	Val	Glu	Val	Trp
		50				55					60				
Gln	Gly	Leu	Ala	Leu	Leu	Ser	Glu	Ala	Val	Leu	Arg	Gly	Gln	Ala	Leu

65	Leu	Val	Asn	Ser	Ser	Gln	Pro	Trp	Glu	Pro	Leu	Gln	Leu	His	Val	Asp	80
					85					90							95
	Lys	Ala	Val	Ser	Gly	Leu	Arg	Ser	Leu	Thr	Thr	Leu	Leu	Arg	Ala	Leu	
					100				105					110			
	Gly	Ala	Gln	Lys	Glu	Ala	Ile	Ser	Pro	Pro	Asp	Ala	Ala	Ser	Ala	Ala	
					115				120					125			
	Pro	Leu	Arg	Thr	Ile	Thr	Ala	Asp	Thr	Phe	Arg	Lys	Leu	Phe	Arg	Val	
					130			135				140					
	Tyr	Ser	Asn	Phe	Leu	Arg	Gly	Lys	Leu	Lys	Leu	Tyr	Thr	Gly	Glu	Ala	
					145						155					160	
	Cys	Arg	Thr	Gly	Gln	Arg											
					165												

<210> 973  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 973	Ala	Pro	Pro	Arg	Leu	Ile	Cys	Asp	Ser	Arg	Val	Leu	Glu	Arg	Tyr	Leu	
	1				5					10					15		
	Leu	Glu	Ala	Lys	Glu	Ala	Glu	Asn	Ile	Thr	Thr	Gly	Cys	Ala	Glu	His	
					20				25					30			
	Cys	Ser	Leu	Asn	Glu	Asn	Ile	Thr	Val	Pro	Asp	Thr	Lys	Val	Asn	Phe	
			35					40					45				
	Tyr	Ala	Trp	Lys	Arg	Met	Glu	Val	Gly	Gln	Gln	Ala	Val	Glu	Val	Trp	
			50				55					60					
	Gln	Gly	Leu	Ala	Leu	Leu	Ser	Glu	Ala	Val	Leu	Arg	Gly	Gln	Ala	Leu	
			65			70					75				80		
	Leu	Val	Asn	Ser	Ser	Gln	Pro	Trp	Glu	Pro	Leu	Gln	Leu	His	Val	Asp	
					85					90					95		
	Lys	Ala	Val	Ser	Gly	Leu	Arg	Ser	Leu	Thr	Thr	Leu	Leu	Arg	Ala	Leu	
					100				105					110			
	Gly	Ala	Gln	Lys	Glu	Ala	Ile	Ser	Pro	Pro	Asp	Ala	Ala	Ser	Ala	Ala	
					115				120					125			
	Pro	Leu	Arg	Thr	Ile	Thr	Ala	Asp	Thr	Phe	Arg	Lys	Leu	Phe	Arg	Val	
					130			135				140					
	Tyr	Ser	Asn	Phe	Leu	Arg	Gly	Lys	Leu	Lys	Leu	Tyr	Thr	Gly	Glu	Ala	
					145						155					160	
	Cys	Arg	Thr	Gly	Asn	Arg											
					165												

<210> 974  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 974	Ala	Pro	Pro	Arg	Leu	Ile	Cys	Asp	Ser	Arg	Val	Leu	Glu	Arg	Tyr	Leu	
	1				5					10					15		
	Leu	Glu	Ala	Lys	Glu	Ala	Glu	Asn	Ile	Thr	Thr	Gly	Cys	Ala	Glu	His	
					20				25					30			
	Cys	Ser	Leu	Asn	Glu	Asn	Ile	Thr	Val	Pro	Asp	Thr	Lys	Val	Asn	Phe	
			35					40					45				
	Tyr	Ala	Trp	Lys	Arg	Met	Glu	Val	Gly	Gln	Gln	Ala	Val	Glu	Val	Trp	
			50				55					60					
	Gln	Gly	Leu	Ala	Leu	Leu	Ser	Glu	Ala	Val	Leu	Arg	Gly	Gln	Ala	Leu	
			65			70					75				80		
	Leu	Val	Asn	Ser	Ser	Gln	Pro	Trp	Glu	Pro	Leu	Gln	Leu	His	Val	Asp	
					85					90					95		
	Lys	Ala	Val	Ser	Gly	Leu	Arg	Ser	Leu	Thr	Thr	Leu	Leu	Arg	Ala	Leu	
					100				105					110			

Gly	Ala	Gln	Lys	Glu	Ile	Ser	Ser	Pro	Asp	Ala	Ala	Ser	Ala
	115					120					125		
Pro	Leu	Arg	Thr	Ile	Thr	Ala	Asp	Thr	Phe	Arg	Lys	Leu	Phe
	130					135					140		Val
Tyr	Ser	Asn	Phe	Leu	Arg	Gly	Lys	Leu	Lys	Leu	Tyr	Thr	Gly
	145				150					155			Ala
Cys	His	Thr	Gly	Asp	Arg								160
				165									

<210> 975  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Ala	Pro	Pro	Arg	Leu	Ile	Cys	Asp	Ser	Arg	Val	Leu	Glu	Arg	Tyr	Leu
1				5					10					15	
Leu	Glu	Ala	Lys	Glu	Ala	Glu	Asn	Ile	Thr	Thr	Gly	Cys	Ala	Glu	His
			20				25						30		
Cys	Ser	Leu	Asn	Glu	Asn	Ile	Thr	Val	Pro	Asp	Thr	Lys	Val	Asn	Phe
		35				40						45			
Tyr	Ala	Trp	Lys	Arg	Met	Glu	Val	Gly	Gln	Gln	Ala	Val	Glu	Val	Trp
	50					55					60				
Gln	Gly	Leu	Ala	Leu	Leu	Ser	Glu	Ala	Val	Leu	Arg	Gly	Gln	Ala	Leu
65				70						75				80	
Leu	Val	Asn	Ser	Ser	Gln	Pro	Trp	Glu	Pro	Leu	Gln	Leu	His	Val	Asp
			85						90					95	
Lys	Ala	Val	Ser	Gly	Leu	Arg	Ser	Leu	Thr	Thr	Leu	Leu	Arg	Ala	Leu
			100					105					110		
Gly	Ala	Gln	Lys	Glu	Ala	Ile	Ser	Ala	Pro	Asp	Ala	Ala	Ser	Ala	Ala
	115					120						125			
Pro	Leu	Arg	Thr	Ile	Thr	Ala	Asp	Thr	Phe	Arg	Lys	Leu	Phe	Arg	Val
	130					135					140				
Tyr	Ser	Asn	Phe	Leu	Arg	Gly	Lys	Leu	Lys	Leu	Tyr	Thr	Gly	Glu	Ala
	145				150					155					160
Cys	Gln	Thr	Gly	Asp	Arg										
				165											

<210> 976  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Ala	Pro	Pro	Arg	Leu	Ile	Cys	Asp	Ser	Arg	Val	Leu	Glu	Arg	Tyr	Leu
1				5					10					15	
Leu	Glu	Ala	Lys	Glu	Ala	Glu	Asn	Ile	Thr	Thr	Gly	Cys	Ala	Glu	His
			20				25						30		
Cys	Ser	Leu	Asn	Glu	Asn	Ile	Thr	Val	Pro	Asp	Thr	Lys	Val	Asn	Phe
		35				40						45			
Tyr	Ala	Trp	Lys	Arg	Met	Glu	Val	Gly	Gln	Gln	Ala	Val	Glu	Val	Trp
	50					55					60				
Gln	Gly	Leu	Ala	Leu	Leu	Ser	Glu	Ala	Val	Leu	Arg	Gly	Gln	Ala	Leu
65				70						75				80	
Leu	Val	Asn	Ser	Ser	Gln	Pro	Trp	Glu	Pro	Leu	Gln	Leu	His	Val	Asp
			85						90					95	
Lys	Ala	Val	Ser	Gly	Leu	Arg	Ser	Leu	Thr	Thr	Leu	Leu	Arg	Ala	Leu
			100					105					110		
Gly	Ala	Gln	Lys	Glu	Ala	Ile	Ser	Pro	Ser	Asp	Ala	Ala	Ser	Ala	Ala
	115					120						125			
Pro	Leu	Arg	Thr	Ile	Thr	Ala	Asp	Thr	Phe	Arg	Lys	Leu	Phe	Arg	Val
	130					135					140				
Tyr	Ser	Asn	Phe	Leu	Arg	Gly	Lys	Leu	Lys	Leu	Tyr	Thr	Gly	Glu	Ala

145  
Cys Arg Thr Gly Gln Arg  
165

155

160

<210> 977  
<211> 166  
<212> PRT  
<213> Homo sapiens

<400> 977  
Ala Pro Pro Arg Leu Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu  
1 5 10 15  
Leu Glu Ala Lys Glu Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His  
20 25 30  
Cys Ser Leu Asn Glu Asn Ile Thr Val Pro Asp Thr Lys Val Asn Phe  
35 40 45  
Tyr Ala Trp Lys Arg Met Glu Val Gly Gln Gln Ala Val Glu Val Trp  
50 55 60  
Gln Gly Leu Ala Leu Leu Ser Glu Ala Val Leu Arg Gly Gln Ala Leu  
65 70 75 80  
Leu Val Asn Ser Ser Gln Pro Trp Glu Pro Leu Gln Leu His Val Asp  
85 90 95  
Lys Ala Val Ser Gly Leu Arg Ser Leu Thr Thr Leu Leu Arg Ala Leu  
100 105 110  
Gly Ala Gln Lys Glu Ala Ile Ser Pro Ala Asp Ala Ala Ser Ala Ala  
115 120 125  
Pro Leu Arg Thr Ile Thr Ala Asp Thr Phe Arg Lys Leu Phe Arg Val  
130 135 140  
Tyr Ser Asn Phe Leu Arg Gly Lys Leu Lys Leu Tyr Thr Gly Glu Ala  
145 150 155 160  
Cys Arg Thr Gly Asn Arg  
165

<210> 978  
<211> 165  
<212> PRT  
<213> Homo sapiens

<400> 978  
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
1 5 10 15  
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
20 25 30  
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
35 40 45  
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
50 55 60  
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
65 70 75 80  
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu  
85 90 95  
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Val Lys  
100 105 110  
Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
115 120 125  
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
130 135 140  
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
145 150 155 160  
Leu Arg Ser Lys Glu  
165

<210> 979

<211> 165  
 <212> PRT  
 <213> Homo sapiens

<400> 979

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
			20					25					30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	His	Glu	Phe	Gly	Asp	Gln	Phe	Gln
		35					40					45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
		50				55					60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70					75					80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	His	Gln	Gln	Leu	Asn	Asp	Leu	Glu
				85					90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
			100					105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
		115					120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 980  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

<400> 980

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
			20					25					30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Gln	Glu	Phe	Gly	Asn	Gln	Phe	Gln
		35					40					45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
		50				55					60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70					75					80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Gly	Leu	Glu
				85					90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
			100					105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
		115					120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 981  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

<400> 981

Cys	Asp	Leu	Pro	Gln	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Met
1				5				10				15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Val	Ser	Cys	Leu
			20					25				30	Lys
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln
		35				40						45	Phe
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Gln	Met	Ile	Gln	Gln
	50				55					60			Ile
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu
65				70						75			80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp
			85						90				95
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu
		100						105					110
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile
		115					120					125	Thr
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val
	130					135					140		Val
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln
145					150					155			160
Leu	Arg	Ser	Lys	Glu									
				165									

<210> 982  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
			20					25					30		
His	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
		35				40						45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	His	Met	Ile	Gln	Gln	Ile	Phe
	50				55					60					
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	His	Thr	Leu
65				70						75					80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
			85						90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Val	Met	Lys
		100						105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
		115					120					125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 983  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
			20					25					30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Phe	Gly	Asn	Gln	Phe	Gln	

35	40	45
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe		
50	55	60
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu		
65	70	75
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu		
85	90	95
Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Ala Leu Met Lys		
100	105	110
Glu Asp Ser Ile Leu Ala Val Arg Gln Tyr Phe Gln Arg Ile Thr Leu		
115	120	125
Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg		
130	135	140
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser		
145	150	155
Leu Arg Ser Lys Glu		160
165		

<210> 984  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

<400> 984
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met
1 5 10 15
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp
20 25 30
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
35 40 45
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
50 55 60
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
65 70 75 80
Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn Asp Leu Glu
85 90 95
Ala Cys Val Ile Gln Arg Val Gly Val Thr Glu Thr Ala Leu Met Lys
100 105 110
Glu Asp Ser Ile Leu Ala Val Arg Gln Tyr Phe Gln Arg Ile Thr Leu
115 120 125
Tyr Leu Lys Glu Gln Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg
130 135 140
Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser
145 150 155 160
Leu Arg Ser Lys Glu
165

<210> 985  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

<400> 985
Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met
1 5 10 15
Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp
20 25 30
Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln
35 40 45
Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe
50 55 60
Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu
65 70 75 80



Leu	Asp	Lys	Phe	Tyr	85	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	95	Glu
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
			100					105					110		
Glu	Asp	Ser	Ile	Val	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
			115					120					125		
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Gly	Trp	Glu	Val	Val	Arg
			130					135				140			
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
					165										

<210> 986  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

<400> 986															
Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
			20					25					30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
			35				40					45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
			50			55					60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70				75						80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
				85					90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Val	Lys
			100					105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	His	Ile	Thr	Leu
			115					120				125			
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
			130					135				140			
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
					165										

<210> 987  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

<400> 987															
Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
			20					25					30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
			35				40					45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
			50			55					60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70				75						80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	His	Gln	Gln	Leu	Asn	Asp	Leu	Glu
				85					90					95	
Ala	Cys	Val	Ile	Gln	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
			100					105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu

	115		120		125										
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130				135						140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	His	Ser
	145				150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 988  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

<400> 988															
Cys	Asp	Leu	Pro	Gln	Thr	His	Ser	Leu	Gly	Ser	Arg	Arg	Thr	Leu	Met
1				5					10					15	
Leu	Leu	Ala	Gln	Met	Arg	Arg	Ile	Ser	Leu	Phe	Ser	Cys	Leu	Lys	Asp
			20					25					30		
Arg	His	Asp	Phe	Gly	Phe	Pro	Gln	Glu	Glu	Phe	Gly	Asn	Gln	Phe	Gln
		35					40					45			
Lys	Ala	Glu	Thr	Ile	Pro	Val	Leu	His	Glu	Met	Ile	Gln	Gln	Ile	Phe
	50					55					60				
Asn	Leu	Phe	Ser	Thr	Lys	Asp	Ser	Ser	Ala	Ala	Trp	Asp	Glu	Thr	Leu
65					70				75						80
Leu	Asp	Lys	Phe	Tyr	Thr	Glu	Leu	Tyr	Gln	Gln	Leu	Asn	Asp	Leu	Glu
			85					90						95	
Ala	Cys	Val	Ile	Ala	Gly	Val	Gly	Val	Thr	Glu	Thr	Pro	Leu	Met	Lys
			100					105					110		
Glu	Asp	Ser	Ile	Leu	Ala	Val	Arg	Lys	Tyr	Phe	Gln	Arg	Ile	Thr	Leu
		115					120				125				
Tyr	Leu	Lys	Glu	Lys	Lys	Tyr	Ser	Pro	Cys	Ala	Trp	Glu	Val	Val	Arg
	130					135					140				
Ala	Glu	Ile	Met	Arg	Ser	Phe	Ser	Leu	Ser	Thr	Asn	Leu	Gln	Glu	Ser
145					150					155					160
Leu	Arg	Ser	Lys	Glu											
				165											

<210> 989  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 989															
Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35					40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50					55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85					90						95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Thr	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160

Thr Gly Tyr Leu Arg  
165

<210> 990  
<211> 166  
<212> PRT  
<213> Homo sapiens

<400> 990  
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
1 5 10 15  
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
20 25 30  
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
35 40 45  
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
50 55 60  
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
65 70 75 80  
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
85 90 95  
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
100 105 110  
Arg Gly Lys Leu Met Ser Ser Leu His Leu Ser Arg Tyr Tyr Gly Arg  
115 120 125  
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
130 135 140  
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
145 150 155 160  
Thr Gly Tyr Leu Arg Asn  
165

<210> 991  
<211> 166  
<212> PRT  
<213> Homo sapiens

<400> 991  
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
1 5 10 15  
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
20 25 30  
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
35 40 45  
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
50 55 60  
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
65 70 75 80  
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
85 90 95  
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
100 105 110  
Arg Gly Lys Leu Met Ser Ser Leu His Leu His Arg Tyr Tyr Gly Arg  
115 120 125  
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
130 135 140  
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
145 150 155 160  
Thr Gly Tyr Leu Arg Asn  
165

<210> 992  
<211> 166

<212> PRT  
<213> Homo sapiens

<400> 992

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50			55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90				95		
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	His	Tyr	Tyr	Gly	Arg
			115				120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130			135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150				155						160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 993

<211> 166

<212> PRT

<213> Homo sapiens

<400> 993

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50			55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90				95		
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Gln	Tyr	Tyr	Gly	Arg
			115				120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130			135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150				155						160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 994

<211> 166

<212> PRT

<213> Homo sapiens

<400> 994

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln

1		5		10															
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu				
			20					25					30						
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln				
		35					40					45							
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln				
		50				55					60								
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn				
65					70				75						80				
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn				
			85						90				95						
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr				
			100					105					110						
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	His				
		115					120					125							
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr				
		130				135					140								
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu				
145					150				155						160				
Thr	Gly	Tyr	Leu	Arg	Asn														
					165														

<210> 995  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 995																				
Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln					
1				5					10				15							
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu					
			20					25					30							
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln					
		35					40					45								
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln					
		50				55					60									
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn					
65					70				75						80					
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn					
			85						90				95							
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr					
			100					105					110							
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Gln					
		115					120					125								
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr					
		130				135					140									
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu					
145					150				155						160					
Thr	Gly	Tyr	Leu	Arg	Asn															
					165															

<210> 996  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 996																				
Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln					
1				5					10				15							
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu					
			20					25					30							
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln					
		35					40					45								

Gln Phe Gln Lys Glu 50 Ala 55 Ala Leu Thr Ile Tyr Glu Met 60 Gln  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg 115 120 125  
 Ile Val His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn 165

<210> 997  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 997  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Leu Thr Ile Tyr Glu Met Leu Gln 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg 115 120 125  
 Ile Ile His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn 165

<210> 998  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 998  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Leu Thr Ile Tyr Glu Met Leu Gln 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn

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<210> 999
<211> 166
<212> PRT
<213> Homo sapiens
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<211> 166
<212> PRT
<213> Homo sapiens
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475

Ile	His	His	Tyr	Leu	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Thr		
130					135					140					
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
				165											

<210> 1001  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1001

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50			55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
			115				120					125			
Ile	Ala	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130				135						140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
				165											

<210> 1002  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1002

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50			55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
			115				120					125			
Ile	Leu	His	Tyr	Leu	Gln	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130				135						140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										



<210> 1003  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1003  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Thr Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1004  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1004  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Ser Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1005  
 <211> 166  
 <212> PRT

<213> Homo sapiens

<400> 1005

Met	Ser	Tyr	Asn	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1			5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys
		20						25				30		Leu
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu
		35					40					45		Gln
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu
		50				55					60			Gln
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp
65					70				75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile
			85						90				95	Asn
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe
			100					105					110	Thr
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly
		115					120					125		Arg
Ile	Leu	His	Tyr	Leu	His	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp
		130				135					140			Thr
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg
145					150				155					160
Thr	Gly	Tyr	Leu	Arg	Asn									
					165									

<210> 1006

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1006

Met	Ser	Tyr	Asn	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1			5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys
		20						25				30		Leu
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu
		35					40					45		Gln
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu
		50				55					60			Gln
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp
65					70				75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile
			85						90				95	Asn
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe
			100					105					110	Thr
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly
		115					120					125		Arg
Ile	Leu	His	Tyr	Leu	Lys	Ala	Gln	Glu	Tyr	Ser	His	Cys	Ala	Trp
		130				135					140			Thr
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg
145					150				155					160
Thr	Gly	Tyr	Leu	Arg	Asn									
					165									

<210> 1007

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1007

Met	Ser	Tyr	Asn	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1			5					10					15	

Cys Gln Lys Leu Leu Gln Leu Asn Gly Arg Leu Glu Tyr Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Thr Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1008  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1008  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Ser Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1009  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1009  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln

50		55		60	
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn					
65		70		75	80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn					
	85		90		95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr					
	100		105		110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg					
	115		120		125
Ile Leu His Tyr Leu Lys Ala His Glu Tyr Ser His Cys Ala Trp Thr					
	130		135		140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu					
	145		150		155
Thr Gly Tyr Leu Arg Asn					160
	165				

<210> 1010  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1010	
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln	
1	5 10 15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu	
	20 25 30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln	
	35 40 45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln	
	50 55 60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn	
65	70 75 80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn	
	85 90 95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr	
	100 105 110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg	
	115 120 125
Ile Leu His Tyr Leu Lys Ala Lys Gln Tyr Ser His Cys Ala Trp Thr	
	130 135 140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu	
	145 150 155
Thr Gly Tyr Leu Arg Asn	
	165

<210> 1011  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1011	
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln	
1	5 10 15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu	
	20 25 30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln	
	35 40 45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln	
	50 55 60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn	
65	70 75 80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn	
	85 90 95

His	Leu	Lys	Thr	Val		Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp		Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	His	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1012

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1012

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1			5					10					15		
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25				30			
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
	35					40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50					55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90				95		
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	His	Leu	Arg	Asn										
					165										

<210> 1013

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1013

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1			5					10					15		
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25				30			
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
	35					40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50					55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90				95		
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr

130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Ile Leu Arg Asn  
 165

<210> 1014  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1014  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu His Asn  
 165

<210> 1015  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1015  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Gln Asn  
 165

<210> 1016  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1016  
 Val Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1017  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1017  
 Ile Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1018  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1018

Thr Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
1 5 10 15  
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
20 25 30  
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
35 40 45  
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
50 55 60  
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
65 70 75 80  
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
85 90 95  
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
100 105 110  
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
115 120 125  
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
130 135 140  
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
145 150 155 160  
Thr Gly Tyr Leu Arg Asn  
165

<210> 1019

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1019

Ala Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
1 5 10 15  
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
20 25 30  
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
35 40 45  
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
50 55 60  
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
65 70 75 80  
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
85 90 95  
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
100 105 110  
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
115 120 125  
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
130 135 140  
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
145 150 155 160  
Thr Gly Tyr Leu Arg Asn  
165

<210> 1020

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1020

Met Ser Tyr Asn Val Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
1 5 10 15  
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu



		20					25				30				
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35					40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
		50				55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
		65				70				75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
		130				135						140			
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
		145				150				155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
			165												

<210> 1021

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1021

Met	Ser	Tyr	Asn	Ile	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
		20						25				30			
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35					40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
		50				55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
		65				70				75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
		130				135						140			
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
		145				150				155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
			165												

<210> 1022

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1022

Met	Ser	Tyr	Asn	Thr	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
		20						25				30			
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35					40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
		50				55					60				

Asn	Ile	Phe	Ala	Ile	70	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Asn	80
65										75					
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105						110	
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
				165											

<210> 1023

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1023

Met	Ser	Tyr	Asn	Gln	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35				40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50					55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65				70					75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105						110	
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
				165											

<210> 1024

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1024

Met	Ser	Tyr	Asn	His	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35				40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50					55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65				70					75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr

			100					105					110				
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg		
		115					120					125					
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr		
	130				135						140						
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu		
145				150						155					160		
Thr	Gly	Tyr	Leu	Arg	Asn												
				165													

<210> 1025

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1025

Met	Ser	Tyr	Asn	Ala	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln		
1			5					10					15				
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu		
		20					25					30					
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln		
	35				40						45						
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln			
	50				55					60							
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn		
65				70				75							80		
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn		
		85					90						95				
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr		
		100					105						110				
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg		
	115						120					125					
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr		
	130				135						140						
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu		
145				150						155					160		
Thr	Gly	Tyr	Leu	Arg	Asn												
				165													

<210> 1026

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1026

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Ile	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln		
1			5					10					15				
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu		
		20					25					30					
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln		
	35				40						45						
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln			
	50				55					60							
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn		
65				70				75							80		
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn		
		85					90						95				
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr		
		100					105						110				
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg		
	115						120					125					
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr		
	130				135						140						

Ile Val Arg Val Glu	Leu Arg Asn Phe Tyr Phe Ile Asn	Leu
145	150	155
Thr Gly Tyr Leu Arg Asn		
165		160

<210> 1027  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1027

Met Ser Tyr Asn Leu Leu Gly Val Leu Gln Arg Ser Ser Asn Phe Gln	
1 5 10 15	
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu	
20 25 30	
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln	
35 40 45	
Gln Phe Gln Lys Glu Asp Ala Leu Thr Ile Tyr Glu Met Leu Gln	
50 55 60	
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn	
65 70 75 80	
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn	
85 90 95	
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr	
100 105 110	
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg	
115 120 125	
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr	
130 135 140	
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu	
145 150 155 160	
Thr Gly Tyr Leu Arg Asn	
165	

<210> 1028  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1028

Met Ser Tyr Asn Leu Leu Gly Phe Val Gln Arg Ser Ser Asn Phe Gln	
1 5 10 15	
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu	
20 25 30	
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln	
35 40 45	
Gln Phe Gln Lys Glu Asp Ala Leu Thr Ile Tyr Glu Met Leu Gln	
50 55 60	
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn	
65 70 75 80	
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn	
85 90 95	
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr	
100 105 110	
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg	
115 120 125	
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr	
130 135 140	
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu	
145 150 155 160	
Thr Gly Tyr Leu Arg Asn	
165	

<210> 1029  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1029  
 Met Ser Tyr Asn Leu Leu Gly Phe Ile Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1030  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1030  
 Met Ser Tyr Asn Leu Leu Gly Phe Thr Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1031  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1031

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Gln	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35				40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50				55						60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75					80	
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85					90					95		
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130				135						140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145				150					155					160	
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1032

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1032

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	His	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35				40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50				55						60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75					80	
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85					90					95		
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130				135						140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145				150					155					160	
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1033

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1033

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Ala	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		

Lys	Asp	Arg	Met	Asn	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Gln
	35					40					45		
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met
	50					55					60		
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly
	65					70				75			80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln
				85					90				95
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp
				100				105					110
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr
		115					120					125	
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala
	130					135					140		
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn
	145					150				155			160
Thr	Gly	Tyr	Leu	Arg	Asn								
				165									

<210> 1034  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	His	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35					40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50					55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
	65					70				75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
				100				105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
	145					150				155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
				165											

<210> 1035  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Gln	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35					40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50					55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn

65	Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn	75	80
	85	90	95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr			
	100	105	110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg			
	115	120	125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr			
	130	135	140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu			
	145	150	155
Thr Gly Tyr Leu Arg Asn			160
	165		

<210> 1036  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1036	
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Ile Gln	
1	5 10 15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu	
	20 25 30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln	
	35 40 45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln	
	50 55 60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn	
65	70 75 80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn	
	85 90 95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr	
	100 105 110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg	
	115 120 125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr	
	130 135 140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu	
	145 150 155
Thr Gly Tyr Leu Arg Asn	160
	165

<210> 1037  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1037	
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Val Gln	
1	5 10 15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu	
	20 25 30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln	
	35 40 45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln	
	50 55 60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn	
65	70 75 80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn	
	85 90 95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr	
	100 105 110



Arg Gly Lys Leu Met Ser Leu His Leu Lys Arg Tyr Tyr Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1038  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1038  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Gln Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1039  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1039  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Thr Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu

145  
Thr Gly Tyr Leu Arg Asn  
165

155

160

<210> 1040  
<211> 166  
<212> PRT  
<213> Homo sapiens

<400> 1040  
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
1 5 10 15  
Cys Gln Ser Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
20 25 30  
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
35 40 45  
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
50 55 60  
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
65 70 75 80  
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
85 90 95  
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
100 105 110  
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
115 120 125  
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
130 135 140  
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
145 150 155 160  
Thr Gly Tyr Leu Arg Asn  
165

<210> 1041  
<211> 166  
<212> PRT  
<213> Homo sapiens

<400> 1041  
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
1 5 10 15  
Cys Gln His Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
20 25 30  
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
35 40 45  
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
50 55 60  
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
65 70 75 80  
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
85 90 95  
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
100 105 110  
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
115 120 125  
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
130 135 140  
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
145 150 155 160  
Thr Gly Tyr Leu Arg Asn  
165

<210> 1042

<211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1042  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Ser Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1043  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1043  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu His Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1044  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1044

Met	Ser	Tyr	Asn	Leu		Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn		Gln
1				5				10					15		
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	His	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40						45		
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50				55					60			
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65						70					75				80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
					85					90				95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
				100					105					110	
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
				115			120						125		
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130				135					140			
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145						150				155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1045

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1045

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5				10					15		
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Ser	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40						45		
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50				55					60			
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65						70					75				80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
					85					90				95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
				100					105					110	
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
				115			120						125		
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130				135					140			
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145						150				155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1046

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1046

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5				10					15		
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Gln	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln

35	40	45
Gln Phe Gln Lys Glu Asp Ala Leu Thr Ile Tyr Glu Met Leu Gln		
50	55	60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn		
65	70	75
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn		
85	90	95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr		
100	105	110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg		
115	120	125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr		
130	135	140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu		
145	150	155
Thr Gly Tyr Leu Arg Asn		160
165		

<210> 1047  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1047
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
1 5 10 15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly His Leu Glu Tyr Cys Leu
20 25 30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
35 40 45
Gln Phe Gln Lys Glu Asp Ala Leu Thr Ile Tyr Glu Met Leu Gln
50 55 60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
65 70 75 80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
85 90 95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
100 105 110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
115 120 125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
130 135 140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
145 150 155 160
Thr Gly Tyr Leu Arg Asn
165

<210> 1048  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1048
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
1 5 10 15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Gln Leu Glu Tyr Cys Leu
20 25 30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
35 40 45
Gln Phe Gln Lys Glu Asp Ala Leu Thr Ile Tyr Glu Met Leu Gln
50 55 60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
65 70 75 80

Glu	Thr	Ile	Val	Glu	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Asn
				85				90				95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp
			100					105				110	Thr
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr
		115					120					125	Gly
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala
	130					135					140		Trp
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn
145					150					155			Arg
Thr	Gly	Tyr	Leu	Arg	Asn								Leu
					165								

<210> 1049

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1049

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Val	Glu	Tyr	Cys	Leu
			20					25				30			
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35				40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50				55					60					
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1050

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1050

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Ile	Glu	Tyr	Cys	Leu
			20					25				30			
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35				40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50				55					60					
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg

Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
130						135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1051  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Thr	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50			55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
			115				120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130			135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1052  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Gln	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50			55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
			115				120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130			135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160

Thr Gly Tyr Leu Arg  
165

<210> 1053  
<211> 166  
<212> PRT  
<213> Homo sapiens

<400> 1053  
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
1 5 10 15  
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg His Glu Tyr Cys Leu  
20 25 30  
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
35 40 45  
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
50 55 60  
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
65 70 75 80  
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
85 90 95  
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
100 105 110  
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
115 120 125  
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
130 135 140  
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
145 150 155 160  
Thr Gly Tyr Leu Arg Asn  
165

<210> 1054  
<211> 166  
<212> PRT  
<213> Homo sapiens

<400> 1054  
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
1 5 10 15  
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Ala Glu Tyr Cys Leu  
20 25 30  
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
35 40 45  
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
50 55 60  
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
65 70 75 80  
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
85 90 95  
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
100 105 110  
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
115 120 125  
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
130 135 140  
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
145 150 155 160  
Thr Gly Tyr Leu Arg Asn  
165

<210> 1055  
<211> 166



<212> PRT  
 <213> Homo sapiens

<400> 1055

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1			5						10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Gln	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50			55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75					80	
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90				95		
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
			115				120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130			135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150				155						160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1056

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1056

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1			5						10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	His	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50			55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75					80	
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90				95		
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
			115				120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130			135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150				155						160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1057

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1057

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

1	5	10																	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	His	Cys	Leu				
			20					25					30						
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln				
		35					40					45							
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln				
		50				55					60								
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn				
65					70				75						80				
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn				
			85					90					95						
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr				
			100					105					110						
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg				
		115					120					125							
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr				
		130				135					140								
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu				
145					150				155						160				
Thr	Gly	Tyr	Leu	Arg	Asn														
					165														

<210> 1058

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1058

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln				
1				5				10					15						
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Ile	Cys	Leu				
			20					25					30						
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln				
		35					40					45							
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln				
		50				55					60								
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn				
65					70				75						80				
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn				
			85					90					95						
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr				
			100					105					110						
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg				
		115					120					125							
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr				
		130				135					140								
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu				
145					150				155						160				
Thr	Gly	Tyr	Leu	Arg	Asn														
					165														

<210> 1059

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1059

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln				
1				5				10					15						
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Val				
			20					25					30						
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln				
		35					40					45							

Gln	Phe	Gln	Lys	Glu		Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met		Gln
50						55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1060  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Ile
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35				40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln	
	50					55				60					
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90				95		
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1061  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Thr
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35				40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln	
	50					55				60					
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn



Ile Leu His Tyr Leu Ala Lys Glu Tyr Ser His Cys Ala Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1064  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1064  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Ala  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1065  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1065  
 Gln Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn

<210> 1066  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1066

```

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
 1           5           10           15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
           20           25           30
Gln Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
           35           40           45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
           50           55           60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
65           70           75           80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
           85           90           95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
           100          105          110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
           115          120          125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
           130          135          140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
145          150          155          160
Thr Gly Tyr Leu Arg Asn
           165

```

<210> 1067  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1067

```

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
 1           5           10           15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
           20           25           30
Thr Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
           35           40           45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
           50           55           60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
65           70           75           80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
           85           90           95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
           100          105          110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
           115          120          125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
           130          135          140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
145          150          155          160
Thr Gly Tyr Leu Arg Asn
           165

```

<210> 1068  
 <211> 166  
 <212> PRT

<213> Homo sapiens

<400> 1068

```
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
 1          5          10          15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
 20          25          30
Ser Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
 35          40          45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
 50          55          60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn
 65          70          75          80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
 85          90          95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
100          105          110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
115          120          125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
130          135          140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
145          150          155          160
Thr Gly Tyr Leu Arg Asn
165
```

<210> 1069

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1069

```
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
 1          5          10          15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
 20          25          30
His Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
 35          40          45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
 50          55          60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn
 65          70          75          80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
 85          90          95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
100          105          110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
115          120          125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
130          135          140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
145          150          155          160
Thr Gly Tyr Leu Arg Asn
165
```

<210> 1070

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1070

```
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
 1          5          10          15
```

Cys Gln Lys Leu Leu Gln Leu Asn Gly Arg Leu Glu Tyr Leu  
 20 25 30  
 Lys Asp His Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1071

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1071

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Gln Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1072

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1072

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Val Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln



50	Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65	Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
					85					90					95	
	His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
					100				105					110		
	Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
					115			120					125			
	Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
					130		135					140				
	Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145						150					155					160
	Thr	Gly	Tyr	Leu	Arg	Asn										
					165											

<210> 1073  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1073	Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1					5					10				15		
	Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
				20					25					30		
	Lys	Asp	Arg	Ile	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
				35				40					45			
	Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
				50			55					60				
	Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80	
	Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85						90					95	
	His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
				100					105					110		
	Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
				115				120					125			
	Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
				130			135					140				
	Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145						150					155					160
	Thr	Gly	Tyr	Leu	Arg	Asn										
					165											

<210> 1074  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1074	Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1					5					10				15		
	Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
				20					25					30		
	Lys	Asp	Arg	Thr	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
				35				40					45			
	Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
				50			55					60				
	Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80	
	Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85						90					95	



130		135		140
Ile Val Arg Val Glu Ile	Leu Arg Asn Phe Tyr	Phe Ile Asn Arg Leu		
145	150	155		160
Thr Gly Tyr Leu Arg Asn				
	165			

<210> 1077  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1077

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln														
1		5				10						15		
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu														
	20				25						30			
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln														
	35				40						45			
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln														
	50				55					60				
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn														
65		70				75							80	
Glu Thr Ile Val Gln Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn														
	85					90							95	
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr														
	100					105							110	
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg														
	115				120								125	
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr														
	130				135						140			
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu														
145		150				155								160
Thr Gly Tyr Leu Arg Asn														
		165												

<210> 1078  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1078

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln														
1		5				10						15		
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu														
	20					25						30		
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln														
	35					40						45		
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln														
	50					55					60			
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn														
65		70					75						80	
Glu Thr Ile Val His Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn														
	85						90						95	
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr														
	100						105						110	
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg														
	115					120							125	
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr														
	130					135						140		
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu														
145		150					155							160
Thr Gly Tyr Leu Arg Asn														
		165												

<210> 1079  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1079  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val His His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1080  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1080  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Ile His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1081  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1081

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50			55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Gln	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
			115				120						125		
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130			135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150				155						160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1082

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1082

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50			55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Thr	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
			115				120						125		
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130			135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150				155						160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1083

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1083

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu

	20		25		30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln					
	35		40		45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln					
	50		55		60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn					
65		70		75	80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn					
	85		90		95
His Leu Ser Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr					
	100		105		110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg					
	115		120		125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr					
	130		135		140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu					
145		150		155	160
Thr Gly Tyr Leu Arg Asn					
	165				

<210> 1084  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1084	
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln	
1	5 10 15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu	
	20 25 30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln	
	35 40 45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln	
	50 55 60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn	
65	70 75 80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn	
	85 90 95
His Leu His Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr	
	100 105 110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg	
	115 120 125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr	
	130 135 140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu	
145	150 155 160
Thr Gly Tyr Leu Arg Asn	
	165

<210> 1085  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1085	
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln	
1	5 10 15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu	
	20 25 30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln	
	35 40 45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln	
	50 55 60

Asn	Ile	Phe	Ala	Ile	70	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Asn	80
65										75					
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Gln	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120						125		
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
		130				135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1086  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35					40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
		50				55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	His	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120						125		
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
		130				135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1087  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35					40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
		50				55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Gln	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr

Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
				165											

<210> 1088

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1088

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1			5					10					15		
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
		20						25				30			
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
	35					40					45				
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50				55					60					
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65				70				75						80	
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
		85						90					95		
His	Leu	Lys	Thr	Val	Leu	Glu	His	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
		100					105					110			
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
	115					120						125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135				140					
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
				165											

<210> 1089

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1089

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1			5					10					15		
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
		20						25				30			
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
	35					40					45				
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50				55					60					
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65				70				75						80	
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
		85						90					95		
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Gln	Leu	Glu	Lys	Glu	Asp	Phe	Thr
		100					105					110			
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
	115					120						125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135				140					



Ile Val Arg Val Glu      Leu Arg Asn Phe Tyr Phe Ile Asn      Leu  
 145                      150                      155                      160  
 Thr Gly Tyr Leu Arg Asn  
                                  165

<210> 1090  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1090  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
   1                  5                  10                  15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
                   20                  25                  30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
                   35                  40                  45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
                   50                  55                  60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
   65                  70                  75                  80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
                   85                  90                  95  
 His Leu Lys Thr Val Leu Glu Glu Thr Leu Glu Lys Glu Asp Phe Thr  
                   100                  105                  110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
                   115                  120                  125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
                   130                  135                  140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
   145                  150                  155                  160  
 Thr Gly Tyr Leu Arg Asn  
                                  165

<210> 1091  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1091  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
   1                  5                  10                  15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
                   20                  25                  30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
                   35                  40                  45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
                   50                  55                  60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
   65                  70                  75                  80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
                   85                  90                  95  
 His Leu Lys Thr Val Leu Glu Glu Ser Leu Glu Lys Glu Asp Phe Thr  
                   100                  105                  110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
                   115                  120                  125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
                   130                  135                  140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
   145                  150                  155                  160  
 Thr Gly Tyr Leu Arg Asn  
                                  165

<210> 1092  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1092

```

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
1          5          10          15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
20          25          30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
35          40          45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
50          55          60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
65          70          75          80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
85          90          95
His Leu Lys Thr Val Leu Glu Glu His Leu Glu Lys Glu Asp Phe Thr
100         105         110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
115         120         125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
130         135         140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
145         150         155         160
Thr Gly Tyr Leu Arg Asn
165
  
```

<210> 1093  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1093

```

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
1          5          10          15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
20          25          30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
35          40          45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
50          55          60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
65          70          75          80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
85          90          95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
100         105         110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
115         120         125
Ile Leu His Tyr Leu Lys Ala Lys Glu His Ser His Cys Ala Trp Thr
130         135         140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
145         150         155         160
Thr Gly Tyr Leu Arg Asn
165
  
```

<210> 1094  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1094

```
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
 1          5          10          15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
 20          25          30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
 35          40          45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
 50          55          60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
 65          70          75          80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
 85          90          95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
 100          105          110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
 115          120          125
Ile Leu His Tyr Leu Lys Ala Lys Glu Ile Ser His Cys Ala Trp Thr
 130          135          140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
 145          150          155          160
Thr Gly Tyr Leu Arg Asn
 165
```

<210> 1095

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1095

```
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
 1          5          10          15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
 20          25          30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
 35          40          45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
 50          55          60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
 65          70          75          80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
 85          90          95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
 100          105          110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
 115          120          125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
 130          135          140
Ile Val Arg Val Glu Ile Leu His Asn Phe Tyr Phe Ile Asn Arg Leu
 145          150          155          160
Thr Gly Tyr Leu Arg Asn
 165
```

<210> 1096

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1096

```
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
 1          5          10          15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
 20          25          30
```



65	Glu Thr Ile Val	Glu Asn Leu Leu Ala	Asn Val Tyr His Gln Ile Asn	75	80
	85	90	95		
	His Leu Lys Thr Val Leu Glu Glu Lys	Leu Glu Lys Glu Asp Phe Thr			
	100	105	110		
	Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg				
	115	120	125		
	Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr				
	130	135	140		
	Ile Val Arg Val Glu Ile Leu Arg Asn Phe Ile Phe Ile Asn Arg Leu				
	145	150	155		160
	Thr Gly Tyr Leu Arg Asn				
	165				

<210> 1099  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1099	Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln	
1	5	10 15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu		
20	25	30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln		
35	40	45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln		
50	55	60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn		
65	70	75 80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn		
85	90	95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr		
100	105	110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg		
115	120	125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr		
130	135	140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn His Leu		
145	150	155 160
Thr Gly Tyr Leu Arg Asn		
165		

<210> 1100  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1100	Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln	
1	5	10 15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu		
20	25	30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln		
35	40	45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln		
50	55	60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn		
65	70	75 80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn		
85	90	95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr		
100	105	110

Arg Gly Lys Leu Met Ser Leu His Leu Lys Arg Tyr Tyr Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Gln Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1101  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1101  
 Asp Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1102  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1102  
 Glu Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160

145  
Thr Gly Tyr Leu Arg Asn  
165

155

160

<210> 1103  
<211> 166  
<212> PRT  
<213> Homo sapiens

<400> 1103  
Lys Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
1 5 10 15  
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
20 25 30  
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
35 40 45  
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
50 55 60  
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
65 70 75 80  
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
85 90 95  
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
100 105 110  
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
115 120 125  
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
130 135 140  
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
145 150 155 160  
Thr Gly Tyr Leu Arg Asn  
165

<210> 1104  
<211> 166  
<212> PRT  
<213> Homo sapiens

<400> 1104  
Asn Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
1 5 10 15  
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
20 25 30  
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
35 40 45  
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
50 55 60  
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
65 70 75 80  
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
85 90 95  
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
100 105 110  
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
115 120 125  
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
130 135 140  
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
145 150 155 160  
Thr Gly Tyr Leu Arg Asn  
165

<210> 1105

<211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1105

Arg	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1			5					10					15		
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln	
			50			55				60					
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90				95		
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
			115				120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130			135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1106  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1106

Ser	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1			5					10					15		
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln	
			50			55				60					
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90				95		
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
			115				120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130			135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1107  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1107



Met	Ser	Tyr	Asn	Asp	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Gln
1				5				10				15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr
			20					25				30	Cys
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln
			35				40					45	Leu
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met
			50			55					60		Leu
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly
65					70				75				80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln
				85					90				95
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp
			100					105				110	Phe
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr
			115				120					125	Gly
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala
			130			135					140		Trp
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn
145					150				155				160
Thr	Gly	Tyr	Leu	Arg	Asn								
				165									

<210> 1108

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1108

Met	Ser	Tyr	Asn	Glu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50			55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90				95		
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
			115				120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130			135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150				155						160
Thr	Gly	Tyr	Leu	Arg	Asn										
				165											

<210> 1109

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1109

Met	Ser	Tyr	Asn	Lys	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln

35	40	45
Gln Phe Gln Lys Glu Asp	Ala Ala Leu Thr Ile Tyr	Glu Met Leu Gln
50	55	60
Asn Ile Phe Ala Ile Phe Arg	Gln Asp Ser Ser Ser	Thr Gly Trp Asn
65	70	75
Glu Thr Ile Val Glu Asn	Leu Leu Ala Asn Val Tyr	His Gln Ile Asn
85	90	95
His Leu Lys Thr Val Leu Glu	Glu Lys Leu Glu Lys Glu	Asp Phe Thr
100	105	110
Arg Gly Lys Leu Met Ser Ser	Leu His Leu Lys Arg Tyr	Tyr Gly Arg
115	120	125
Ile Leu His Tyr Leu Lys Ala	Lys Glu Tyr Ser His Cys	Ala Trp Thr
130	135	140
Ile Val Arg Val Glu Ile	Leu Arg Asn Phe Tyr Phe	Ile Asn Arg Leu
145	150	155
Thr Gly Tyr Leu Arg Asn		
165		

<210> 1110  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1110
Met Ser Tyr Asn Arg Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
1 5 10 15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
20 25 30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
35 40 45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
50 55 60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
65 70 75 80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
85 90 95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
100 105 110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
115 120 125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
130 135 140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
145 150 155 160
Thr Gly Tyr Leu Arg Asn
165

<210> 1111  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1111
Met Ser Tyr Asn Asn Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
1 5 10 15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
20 25 30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
35 40 45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
50 55 60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
65 70 75 80

Glu	Thr	Ile	Val	Glu	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Asn
				85				90				95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp
			100					105				110	Phe
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr
		115					120					125	Gly
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala
	130					135					140		Trp
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn
145					150					155			Arg
Thr	Gly	Tyr	Leu	Arg	Asn								Leu
				165									160

<210> 1112

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1112

Met	Ser	Tyr	Asn	Ser	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
		20						25				30			
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
	35					40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50				55						60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
				165											

<210> 1113

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1113

Met	Ser	Tyr	Asn	Leu	Asp	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
		20						25				30			
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
	35					40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50				55						60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg

Ile	Leu	115	His	Tyr	Leu	Lys	Ala	120	Lys	Glu	Tyr	Ser	His	125	Cys	Ala	Trp	Thr
	130						135						140					
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu			
145					150					155					160			
Thr	Gly	Tyr	Leu	Arg	Asn													
					165													

<210> 1114  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Met	Ser	Tyr	Asn	Leu	Glu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln			
1				5					10					15				
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu			
			20					25					30					
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln			
		35					40					45						
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln			
	50					55					60							
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn			
65					70				75						80			
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn			
			85						90					95				
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr			
			100					105					110					
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg			
		115					120					125						
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr			
	130					135					140							
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu			
145					150					155					160			
Thr	Gly	Tyr	Leu	Arg	Asn													
					165													

<210> 1115  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Met	Ser	Tyr	Asn	Leu	Lys	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln			
1				5					10					15				
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu			
			20					25					30					
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln			
		35					40					45						
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln			
	50					55					60							
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn			
65					70				75						80			
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn			
			85						90					95				
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr			
			100					105					110					
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg			
		115					120					125						
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr			
	130					135					140							
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu			
145					150					155					160			

Thr Gly Tyr Leu Arg  
165

<210> 1116  
<211> 166  
<212> PRT  
<213> Homo sapiens

<400> 1116  
Met Ser Tyr Asn Leu Asn Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
1 5 10 15  
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
20 25 30  
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
35 40 45  
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
50 55 60  
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
65 70 75 80  
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
85 90 95  
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
100 105 110  
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
115 120 125  
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
130 135 140  
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
145 150 155 160  
Thr Gly Tyr Leu Arg Asn  
165

<210> 1117  
<211> 166  
<212> PRT  
<213> Homo sapiens

<400> 1117  
Met Ser Tyr Asn Leu Gln Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
1 5 10 15  
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
20 25 30  
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
35 40 45  
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
50 55 60  
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
65 70 75 80  
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
85 90 95  
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
100 105 110  
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
115 120 125  
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
130 135 140  
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
145 150 155 160  
Thr Gly Tyr Leu Arg Asn  
165

<210> 1118  
<211> 166

<212> PRT  
<213> Homo sapiens

<400> 1118

Met	Ser	Tyr	Asn	Leu	Arg	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35					40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50					55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90				95		
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
				165											

<210> 1119

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1119

Met	Ser	Tyr	Asn	Leu	Ser	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35					40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50					55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90				95		
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
				165											

<210> 1120

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1120

Met	Ser	Tyr	Asn	Leu	Thr	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

1		5		10													
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu		
			20					25					30				
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln		
		35					40					45					
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln		
	50				55						60						
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn		
65					70					75					80		
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn		
			85					90					95				
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr		
		100						105					110				
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg		
		115					120					125					
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr		
	130					135					140						
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu		
145					150					155					160		
Thr	Gly	Tyr	Leu	Arg	Asn												
				165													

<210> 1121  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1121																	
Met	Ser	Tyr	Asn	Leu	Leu	Gly	Asp	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln		
1				5					10					15			
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu		
			20					25					30				
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln		
		35					40					45					
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln		
	50				55						60						
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn		
65					70					75					80		
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn		
			85					90					95				
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr		
		100						105					110				
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg		
		115					120					125					
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr		
	130					135					140						
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu		
145					150					155					160		
Thr	Gly	Tyr	Leu	Arg	Asn												
				165													

<210> 1122  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1122																	
Met	Ser	Tyr	Asn	Leu	Leu	Gly	Glu	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln		
1				5					10					15			
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu		
			20					25					30				
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln		
		35					40					45					

Gln	Phe	Gln	Lys	Glu		Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met		Gln
50						55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65						70				75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1123

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1123

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Lys	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
	35					40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50				55						60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1124

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1124

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Arg	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
	35					40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50				55						60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn



[illegible]

<400> 1125

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<210> 1126
<211> 166
<212> PRT
<213> Homo sapiens
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Met 1	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Glu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg

Ile Leu His Tyr Leu Ala Lys Glu Tyr Ser His Cys Ala Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1127  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1127  
 Met Ser Tyr Asn Leu Leu Gly Phe Lys Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1128  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1128  
 Met Ser Tyr Asn Leu Leu Gly Phe Asn Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn

<210> 1129  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1129  
 Met Ser Tyr Asn Leu Leu Gly Phe Arg Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1130  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1130  
 Met Ser Tyr Asn Leu Leu Gly Phe Ser Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1131  
 <211> 166  
 <212> PRT

<213> Homo sapiens

<400> 1131

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Asp	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50				55				60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
			115				120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130			135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1132

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1132

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Glu	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50				55				60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
			115				120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130			135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1133

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1133

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Lys	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	

Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1134  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1134  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Asn Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1135  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1135  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Arg Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln

50	Asn	Ile	Phe	Ala	Ile	55	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65	Glu	Thr	Ile	Val	Glu	70	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
					85						90					95	
	His	Leu	Lys	Thr	Val	100	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
										105					110		
	Arg	Gly	Lys	Leu	Met	115	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
										120					125		
	Ile	Leu	His	Tyr	Leu	130	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
										135					140		
	Ile	Val	Arg	Val	Glu	145	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
										150			155				160
	Thr	Gly	Tyr	Leu	Arg	165	Asn										

<210> 1136  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1136	Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Ser	Arg	Ser	Ser	Asn	Phe	Gln
1				5						10					15	
	Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
				20					25					30		
	Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
				35				40					45			
	Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
				50			55					60				
	Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75						80
	Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
					85					90					95	
	His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
				100					105					110		
	Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
				115				120						125		
	Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
				130			135						140			
	Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145						150					155					160
	Thr	Gly	Tyr	Leu	Arg	Asn										
					165											

<210> 1137  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1137	Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Thr	Arg	Ser	Ser	Asn	Phe	Gln
1				5						10					15	
	Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
				20					25					30		
	Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
				35				40					45			
	Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
				50			55					60				
	Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75						80
	Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
					85					90					95	

His Leu Lys Thr Val ~~Leu~~ Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1138  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1138  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Asp Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1139  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1139  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Glu Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr

130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1140  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1140  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Lys Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1141  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1141  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Arg Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165



<210> 1142  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1142

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Asp	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35				40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50				55						60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85					90					95		
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150				155						160
Thr	Gly	Tyr	Leu	Arg	Asn										
				165											

<210> 1143  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1143

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Glu	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35				40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50				55						60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85					90					95		
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150				155						160
Thr	Gly	Tyr	Leu	Arg	Asn										
				165											

<210> 1144  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1144

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Lys	Asn	Phe	Gln
1			5						10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50				55				60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75					80	
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
			115				120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130				135					140			
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1145

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1145

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Asn	Asn	Phe	Gln
1			5						10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50				55				60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75					80	
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
			115				120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130				135					140			
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1146

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1146

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Gln	Asn	Phe	Gln
1			5						10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu



Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1149  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1149  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asp Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1150  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1150  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Glu Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr



Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1153  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1153  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Arg Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1154  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1154  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Ser Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1155  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1155  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Thr Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1156  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1156  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Asp Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1157  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1157

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Glu	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35					40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
		50				55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
		130				135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
				165											

<210> 1158

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1158

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Lys	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35					40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
		50				55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
		130				135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
				165											

<210> 1159

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1159

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Arg	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		



Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1160  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1160  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Asp  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1161  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1161  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Glu  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn



Arg Gly Lys Leu Met Ser Leu His Leu Lys Arg Tyr Tyr Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1164  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1164  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Arg  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1165  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1165  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Ser  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu

145  
Thr Gly Tyr Leu Arg Asn  
165

155

160

<210> 1166  
<211> 166  
<212> PRT  
<213> Homo sapiens

<400> 1166  
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Thr  
1 5 10 15  
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
20 25 30  
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
35 40 45  
Gln Phe Gln Lys Glu Asp Ala Leu Thr Ile Tyr Glu Met Leu Gln  
50 55 60  
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
65 70 75 80  
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
85 90 95  
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
100 105 110  
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
115 120 125  
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
130 135 140  
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
145 150 155 160  
Thr Gly Tyr Leu Arg Asn  
165

<210> 1167  
<211> 166  
<212> PRT  
<213> Homo sapiens

<400> 1167  
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
1 5 10 15  
Asp Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
20 25 30  
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
35 40 45  
Gln Phe Gln Lys Glu Asp Ala Leu Thr Ile Tyr Glu Met Leu Gln  
50 55 60  
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
65 70 75 80  
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
85 90 95  
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
100 105 110  
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
115 120 125  
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
130 135 140  
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
145 150 155 160  
Thr Gly Tyr Leu Arg Asn  
165

<210> 1168

<211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1168  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Glu Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1169  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1169  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Lys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1170  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1170

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Asn Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1171  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1171  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Gln Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1172  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1172  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Arg Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln

35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1173  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1173  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Ser Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1174  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1174  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Thr Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80

Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Asn	
				85					90				95		
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120						125		
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1175  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Asn	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35				40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln	
	50				55					60					
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120						125		
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1176  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Gln	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35				40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln	
	50				55					60					
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg





Thr Gly Tyr Leu Arg Asn  
165

<210> 1179  
<211> 166  
<212> PRT  
<213> Homo sapiens

<400> 1179  
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
1 5 10 15  
Cys Gln Lys Thr Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
20 25 30  
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
35 40 45  
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
50 55 60  
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
65 70 75 80  
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
85 90 95  
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
100 105 110  
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
115 120 125  
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
130 135 140  
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
145 150 155 160  
Thr Gly Tyr Leu Arg Asn  
165

<210> 1180  
<211> 166  
<212> PRT  
<213> Homo sapiens

<400> 1180  
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
1 5 10 15  
Cys Gln Lys Asp Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
20 25 30  
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
35 40 45  
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
50 55 60  
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
65 70 75 80  
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
85 90 95  
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
100 105 110  
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
115 120 125  
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
130 135 140  
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
145 150 155 160  
Thr Gly Tyr Leu Arg Asn  
165

<210> 1181  
<211> 166

<212> PRT  
<213> Homo sapiens

<400> 1181

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Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
 1           5           10           15
Cys Gln Lys Glu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
          20           25           30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
          35           40           45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
          50           55           60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
65           70           75           80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
          85           90           95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
          100          105          110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
          115          120          125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
          130          135          140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
145           150           155           160
Thr Gly Tyr Leu Arg Asn
          165
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<210> 1182

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1182

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Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
 1           5           10           15
Cys Gln Lys Lys Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
          20           25           30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
          35           40           45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
          50           55           60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
65           70           75           80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
          85           90           95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
          100          105          110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
          115          120          125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
          130          135          140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
145           150           155           160
Thr Gly Tyr Leu Arg Asn
          165
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<210> 1183

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1183

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln

1	5	10																	
Cys	Gln	Lys	Leu	Leu	Asp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu				
			20					25					30						
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln				
		35					40					45							
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln				
		50				55					60								
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn				
65					70				75						80				
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn				
			85					90					95						
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr				
			100					105					110						
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg				
		115					120					125							
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr				
		130				135					140								
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu				
145					150				155						160				
Thr	Gly	Tyr	Leu	Arg	Asn														
			165																

<210> 1184

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1184

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln				
1				5					10				15						
Cys	Gln	Lys	Leu	Leu	Glu	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu				
			20					25					30						
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln				
		35					40					45							
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln				
		50				55					60								
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn				
65					70				75						80				
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn				
			85					90					95						
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr				
			100					105					110						
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg				
		115					120					125							
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr				
		130				135					140								
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu				
145					150				155						160				
Thr	Gly	Tyr	Leu	Arg	Asn														
			165																

<210> 1185

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1185

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln				
1				5					10				15						
Cys	Gln	Lys	Leu	Leu	Lys	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu				
			20					25					30						
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln				
		35					40					45							

Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
50						55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1186  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Arg	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
		20						25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35				40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50				55						60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1187  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Asp	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
		20						25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35				40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50				55						60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn

85 90  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1188  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1188  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Glu Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1189  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1189  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Lys Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125

Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
130						135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1190  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Arg	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50			55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
			115				120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130			135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1191  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Asp	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50			55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
			115				120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130			135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										

<210> 1192  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1192

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Glu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35				40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
		50				55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75					80	
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150				155						160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1193  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1193

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Lys	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35				40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
		50				55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75					80	
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150				155						160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1194  
 <211> 166  
 <212> PRT



<213> Homo sapiens

<400> 1194

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Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
 1          5          10          15
Cys Gln Lys Leu Leu Trp Gln Arg Asn Gly Arg Leu Glu Tyr Cys Leu
      20          25          30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
      35          40          45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
      50          55          60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
      65          70          75          80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
      85          90          95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
      100          105          110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
      115          120          125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
      130          135          140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
      145          150          155          160
Thr Gly Tyr Leu Arg Asn
      165
```

<210> 1195

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1195

```
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
 1          5          10          15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
      20          25          30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
      35          40          45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
      50          55          60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Asp Trp Asn
      65          70          75          80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
      85          90          95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
      100          105          110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
      115          120          125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
      130          135          140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
      145          150          155          160
Thr Gly Tyr Leu Arg Asn
      165
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<210> 1196

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1196

```
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
 1          5          10          15
```

Cys Gln Lys Leu Leu Asp Gln Leu Asn Gly Arg Leu Glu Tyr Phe Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Glu Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1197  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1197  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Lys Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1198  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1198  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln

50	Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Arg	Trp	Asn
65	Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85						90				95		
	His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
				100					105					110		
	Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
				115				120						125		
	Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
				130			135					140				
	Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145						150					155				160	
	Thr	Gly	Tyr	Leu	Arg	Asn										
						165										

<210> 1199  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1199	Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5						10				15		
	Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
				20					25					30		
	Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
				35			40						45			
	Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
				50			55					60				
	Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Asp	Asn
65						70				75					80	
	Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85						90				95		
	His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
				100					105					110		
	Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
				115				120						125		
	Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
				130			135					140				
	Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145						150					155				160	
	Thr	Gly	Tyr	Leu	Arg	Asn										
						165										

<210> 1200  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1200	Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5						10				15		
	Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
				20					25					30		
	Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
				35			40						45			
	Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
				50			55					60				
	Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Glu	Asn
65						70				75					80	
	Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85						90				95		

His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Leu	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1201  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35					40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50					55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Lys	Asn
65					70					75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1202  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35					40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50					55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Arg	Asn
65					70					75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr

130		135		140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu				
145		150	155	160
Thr Gly Tyr Leu Arg Asn				
165				

<210> 1203  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1203

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln				
1	5	10	15	
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu				
20	25	30		
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln				
35	40	45		
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln				
50	55	60		
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asp				
65	70	75	80	
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn				
85	90	95		
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr				
100	105	110		
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg				
115	120	125		
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr				
130	135	140		
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu				
145	150	155	160	
Thr Gly Tyr Leu Arg Asn				
165				

<210> 1204  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1204

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln				
1	5	10	15	
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu				
20	25	30		
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln				
35	40	45		
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln				
50	55	60		
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Glu				
65	70	75	80	
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn				
85	90	95		
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr				
100	105	110		
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg				
115	120	125		
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr				
130	135	140		
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu				
145	150	155	160	
Thr Gly Tyr Leu Arg Asn				
165				

<210> 1205  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1205  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Lys  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1206  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1206  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Arg  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1207  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1207

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
1 5 10 15  
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
20 25 30  
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
35 40 45  
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
50 55 60  
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
65 70 75 80  
Glu Asp Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
85 90 95  
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
100 105 110  
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
115 120 125  
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
130 135 140  
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
145 150 155 160  
Thr Gly Tyr Leu Arg Asn  
165

<210> 1208

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1208

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
1 5 10 15  
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
20 25 30  
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
35 40 45  
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
50 55 60  
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
65 70 75 80  
Glu Glu Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
85 90 95  
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
100 105 110  
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
115 120 125  
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
130 135 140  
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
145 150 155 160  
Thr Gly Tyr Leu Arg Asn  
165

<210> 1209

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1209

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
1 5 10 15  
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu





Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Asp	Asn
65					70					75					80
Glu	Thr	Asp	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
				165											

<210> 1212  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1212															
Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
		20						25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
	35					40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50					55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80
Glu	Thr	Glu	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
	130					135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
				165											

<210> 1213  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1213															
Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
		20						25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
	35					40						45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
	50					55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80
Glu	Thr	Lys	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr



Ile Val Arg Val Glu	Leu Arg Asn Phe Tyr Phe Ile Asn	Leu
145	155	160
Thr Gly Tyr Leu Arg Asn		
165		

<210> 1216  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1216

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln	
1 5 10 15	
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu	
20 25 30	
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln	
35 40 45	
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln	
50 55 60	
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn	
65 70 75 80	
Glu Thr Gln Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn	
85 90 95	
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr	
100 105 110	
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg	
115 120 125	
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr	
130 135 140	
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu	
145 150 155 160	
Thr Gly Tyr Leu Arg Asn	
165	

<210> 1217  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1217

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln	
1 5 10 15	
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu	
20 25 30	
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln	
35 40 45	
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln	
50 55 60	
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn	
65 70 75 80	
Glu Thr Ser Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn	
85 90 95	
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr	
100 105 110	
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg	
115 120 125	
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr	
130 135 140	
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu	
145 150 155 160	
Thr Gly Tyr Leu Arg Asn	
165	

<210> 1218  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1218  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Thr Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1219  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1219  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asp Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1220  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1220

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1			5						10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50			55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80
Glu	Thr	Ile	Val	Glu	Glu	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
			115				120						125		
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130			135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1221

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1221

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1			5						10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50			55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80
Glu	Thr	Ile	Val	Glu	Lys	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
			115				120						125		
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130			135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1222

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1222

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1			5						10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		

Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Arg Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1223  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1223  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Gln Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1224  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1224  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn

65	Glu	Thr	Ile	Val	Glu	Ser	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn	80
					85					90					95		
	His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr	
				100					105					110			
	Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg	
			115					120					125				
	Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr	
		130					135					140					
	Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu	
	145				150				155							160	
	Thr	Gly	Tyr	Leu	Arg	Asn											
					165												

<210> 1225  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1225	Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln	
	1				5					10				15			
	Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu	
			20						25					30			
	Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln	
		35					40						45				
	Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln	
		50				55					60						
	Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Thr	Gly	Trp	Asn		
	65				70				75					80			
	Glu	Thr	Ile	Val	Glu	Thr	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn	
				85					90					95			
	His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr	
			100					105					110				
	Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg	
		115					120					125					
	Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr	
		130				135					140						
	Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu	
	145				150				155							160	
	Thr	Gly	Tyr	Leu	Arg	Asn											
					165												

<210> 1226  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1226	Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln	
	1				5					10				15			
	Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu	
			20						25					30			
	Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln	
		35					40						45				
	Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln	
		50				55					60						
	Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Thr	Gly	Trp	Asn		
	65				70				75					80			
	Glu	Thr	Ile	Val	Glu	Asn	Asp	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn	
			85						90					95			
	His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr	
			100					105					110				

Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1227  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1227  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Glu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1228  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1228  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Lys Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu



145  
 Thr Gly Tyr Leu Arg Asn  
 165

155

160

<210> 1229  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1229  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Arg Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1230  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1230  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Asn Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1231

<211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1231  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Gln Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1232  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1232  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Ser Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1233  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1233

Met	Ser	Tyr	Asn	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln	
1				5				10					15		
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35					40					45		
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50			55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80
Glu	Thr	Ile	Val	Glu	Asn	Thr	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
			115				120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130			135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1234

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1234

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5				10						15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50			55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Asp	Asn	Val	Tyr	His	Gln	Ile	Asn
			85					90						95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
			115				120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130			135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1235

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1235

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5				10						15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln

35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Glu Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1236  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1236  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Lys Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1237  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1237  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80

Glu Thr Ile Val Glu Asn Leu Leu Arg Asn Val Tyr His Gln Ile Asn  
                   85                  90                  95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
                   100                  105                  110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
                   115                  120                  125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
                   130                  135                  140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
                   145                  150                  155                  160  
 Thr Gly Tyr Leu Arg Asn  
                   165

<210> 1238  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1238  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
   1                  5                  10                  15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
                   20                  25                  30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
                   35                  40                  45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
                   50                  55                  60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
   65                  70                  75                  80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asp Val Tyr His Gln Ile Asn  
                   85                  90                  95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
                   100                  105                  110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
                   115                  120                  125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
                   130                  135                  140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
                   145                  150                  155                  160  
 Thr Gly Tyr Leu Arg Asn  
                   165

<210> 1239  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1239  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
   1                  5                  10                  15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
                   20                  25                  30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
                   35                  40                  45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
                   50                  55                  60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
   65                  70                  75                  80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Glu Val Tyr His Gln Ile Asn  
                   85                  90                  95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
                   100                  105                  110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg

115		120		125											
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
130		135		140											
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145		150		155											160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1240  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1240
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
1 5 10 15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
20 25 30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
35 40 45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
50 55 60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
65 70 75 80
Glu Thr Ile Val Glu Asn Leu Leu Ala Lys Val Tyr His Gln Ile Asn
85 90 95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
100 105 110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
115 120 125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
130 135 140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
145 150 155 160
Thr Gly Tyr Leu Arg Asn
165

<210> 1241  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1241
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
1 5 10 15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
20 25 30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
35 40 45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
50 55 60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
65 70 75 80
Glu Thr Ile Val Glu Asn Leu Leu Ala Gln Val Tyr His Gln Ile Asn
85 90 95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
100 105 110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
115 120 125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
130 135 140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
145 150 155 160

Thr Gly Tyr Leu Arg Asn  
165

<210> 1242  
<211> 166  
<212> PRT  
<213> Homo sapiens

<400> 1242  
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
1 5 10 15  
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
20 25 30  
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
35 40 45  
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
50 55 60  
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
65 70 75 80  
Glu Thr Ile Val Glu Asn Leu Leu Ala Arg Val Tyr His Gln Ile Asn  
85 90 95  
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
100 105 110  
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
115 120 125  
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
130 135 140  
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
145 150 155 160  
Thr Gly Tyr Leu Arg Asn  
165

<210> 1243  
<211> 166  
<212> PRT  
<213> Homo sapiens

<400> 1243  
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
1 5 10 15  
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
20 25 30  
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
35 40 45  
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
50 55 60  
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
65 70 75 80  
Glu Thr Ile Val Glu Asn Leu Leu Ala Ser Val Tyr His Gln Ile Asn  
85 90 95  
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
100 105 110  
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
115 120 125  
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
130 135 140  
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
145 150 155 160  
Thr Gly Tyr Leu Arg Asn  
165

<210> 1244  
<211> 166

<212> PRT  
<213> Homo sapiens

<400> 1244

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50			55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Thr	Val	Tyr	His	Gln	Ile	Asn
				85					90				95		
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
			115				120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130			135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150				155						160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1245

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1245

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50			55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Asp	Tyr	His	Gln	Ile	Asn
				85					90				95		
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
			115				120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130			135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150				155						160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1246

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1246

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln



1	5	10																	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu				
			20					25					30						
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln				
			35				40					45							
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln				
			50			55					60								
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn				
65					70				75					80					
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Glu	Tyr	His	Gln	Ile	Asn				
			85					90					95						
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr				
			100					105					110						
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg				
			115				120						125						
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr				
			130			135					140								
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu				
145					150				155					160					
Thr	Gly	Tyr	Leu	Arg	Asn														
					165														

<210> 1247  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1247																			
Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln				
1				5				10					15						
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu				
			20					25					30						
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln				
			35				40					45							
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln				
			50			55					60								
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn				
65					70				75					80					
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Lys	Tyr	His	Gln	Ile	Asn				
			85					90					95						
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr				
			100					105					110						
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg				
			115				120						125						
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr				
			130			135					140								
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu				
145					150				155					160					
Thr	Gly	Tyr	Leu	Arg	Asn														
					165														

<210> 1248  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1248																			
Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln				
1				5				10					15						
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu				
			20					25					30						
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln				
			35				40					45							

Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Asn Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1249

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1249

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Gln Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1250

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1250

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Arg Tyr His Gln Ile Asn

85 90  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1251  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1251  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Ser Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1252  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1252  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Thr Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125

Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
130						135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145						150				155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1253  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50			55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Asp	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
			115				120						125		
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130			135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145						150				155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1254  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50			55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75						80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Glu	Ile	Asn
				85					90					95	
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
			115				120						125		
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130			135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145						150				155					160
Thr	Gly	Tyr	Leu	Arg	Asn										

<210> 1255  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1255  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Lys Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1256  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1256  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Asn Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1257  
 <211> 166  
 <212> PRT

<213> Homo sapiens

<400> 1257

```
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
 1          5          10          15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
 20          25          30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
 35          40          45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
 50          55          60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
 65          70          75          80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Arg Ile Asn
 85          90          95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
100          105          110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
115          120          125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
130          135          140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
145          150          155          160
Thr Gly Tyr Leu Arg Asn
165
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<210> 1258

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1258

```
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
 1          5          10          15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
 20          25          30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
 35          40          45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
 50          55          60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
 65          70          75          80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Ser Ile Asn
 85          90          95
His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
100          105          110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
115          120          125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
130          135          140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
145          150          155          160
Thr Gly Tyr Leu Arg Asn
165
```

<210> 1259

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1259

```
Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
 1          5          10          15
```

Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
                   20                  25                  30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
                   35                  40                  45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
                   50                  55                  60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
                   65                  70                  75                  80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Thr Ile Asn  
                   85                  90                  95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
                   100                  105                  110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
                   115                  120                  125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
                   130                  135                  140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
                   145                  150                  155                  160  
 Thr Gly Tyr Leu Arg Asn  
                   165

<210> 1260

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1260

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
   1                  5                  10                  15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
                   20                  25                  30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
                   35                  40                  45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
                   50                  55                  60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
                   65                  70                  75                  80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Asp Asn  
                   85                  90                  95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
                   100                  105                  110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
                   115                  120                  125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
                   130                  135                  140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
                   145                  150                  155                  160  
 Thr Gly Tyr Leu Arg Asn  
                   165

<210> 1261

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1261

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
   1                  5                  10                  15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
                   20                  25                  30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
                   35                  40                  45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln

50	Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65						70					75					80
	Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Glu	Asn
					85					90					95	
	His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
					100				105					110		
	Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
					115			120					125			
	Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
					130		135					140				
	Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
	145					150					155				160	
	Thr	Gly	Tyr	Leu	Arg	Asn										
					165											

<210> 1262  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1262	Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1					5					10					15	
	Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
					20				25					30		
	Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
					35			40					45			
	Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
					50		55					60				
	Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
	65					70				75					80	
	Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Lys	Asn
					85					90				95		
	His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
					100				105					110		
	Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
					115			120					125			
	Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
					130		135					140				
	Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
	145					150					155				160	
	Thr	Gly	Tyr	Leu	Arg	Asn										
					165											

<210> 1263  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1263	Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1					5					10					15	
	Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
					20				25					30		
	Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
					35			40					45			
	Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
					50		55					60				
	Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
	65					70				75					80	
	Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Asn	Asn
					85					90				95		



His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1264  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1264  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Gln Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1265  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1265  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Arg Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr

130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1266  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1266  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ser Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1267  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1267  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Thr Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1268  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1268

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Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
 1          5          10          15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
          20          25          30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
          35          40          45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
 50          55          60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn
65          70          75          80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
          85          90          95
Asp Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
          100          105          110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
          115          120          125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
          130          135          140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
145          150          155          160
Thr Gly Tyr Leu Arg Asn
          165

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<210> 1269  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1269

```

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
 1          5          10          15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
          20          25          30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
          35          40          45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
 50          55          60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn
65          70          75          80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
          85          90          95
Glu Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
          100          105          110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
          115          120          125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
          130          135          140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
145          150          155          160
Thr Gly Tyr Leu Arg Asn
          165

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<210> 1270  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1270

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50				55				60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75					80	
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90				95		
Lys	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
			115				120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130				135				140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150				155					160	
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1271

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1271

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
			20					25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
			35				40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
			50				55				60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70				75					80	
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
				85					90				95		
Asn	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
			115				120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
			130				135				140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150				155					160	
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1272

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1272

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu



Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 Ser Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1275  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1275  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 Thr Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1276  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1276  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Asp Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr



Ile Val Arg Val Glu Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1279  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1279  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Asn Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1280  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1280  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Gln Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165



<210> 1281  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1281

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Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
1          5          10          15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
20          25          30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
35          40          45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
50          55          60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
65          70          75          80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
85          90          95
His Arg Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
100         105         110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
115         120         125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
130         135         140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
145         150         155         160
Thr Gly Tyr Leu Arg Asn
165

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<210> 1282  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1282

```

Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
1          5          10          15
Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
20          25          30
Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
35          40          45
Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
50          55          60
Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
65          70          75          80
Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
85          90          95
His Ser Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
100         105         110
Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
115         120         125
Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
130         135         140
Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
145         150         155         160
Thr Gly Tyr Leu Arg Asn
165

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<210> 1283  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1283

Met Ser Tyr Asn Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Thr Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1284  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1284  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Asp Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1285  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1285  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45

Gln Phe Gln Lys Glu Ala Ala Leu Thr Ile Tyr Glu Met Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Glu Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1286  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1286  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Lys Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1287  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1287  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn



Ile Leu His Tyr Leu Asp Ala Lys Glu Tyr Ser His Cys Ala Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1290  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1290  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Ser Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1291  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1291  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Thr Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn

<210> 1292  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1292  
 Cys Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1293  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1293  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Cys Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1294  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1294

Met	Ser	Tyr	Asn	Leu	Cys	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1			5						10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
		20						25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35					40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
		50				55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90				95		
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
		130				135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1295

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1295

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1			5						10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
		20						25					30		
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
		35					40					45			
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
		50				55					60				
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65					70					75					80
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Val	Tyr	His	Gln	Ile	Asn
			85						90				95		
His	Cys	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
			100					105					110		
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
		115					120					125			
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
		130				135					140				
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
145					150					155					160
Thr	Gly	Tyr	Leu	Arg	Asn										
					165										

<210> 1296

<211> 166

<212> PRT

<213> Homo sapiens

<400> 1296

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Cys	Arg	Ser	Ser	Asn	Phe	Gln
1			5						10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu





Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Asp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1299  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1299  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Cys Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr  
 100 105 110  
 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg  
 115 120 125  
 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr  
 130 135 140  
 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu  
 145 150 155 160  
 Thr Gly Tyr Leu Arg Asn  
 165

<210> 1300  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1300  
 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Cys  
 1 5 10 15  
 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu  
 20 25 30  
 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln  
 35 40 45  
 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln  
 50 55 60  
 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn  
 65 70 75 80  
 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn  
 85 90 95  
 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr

Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
Thr	Gly	Tyr	Leu	Arg	Asn										

<210> 1301  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65															
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Cys	Val	Tyr	His	Gln	Ile	Asn
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr
Ile	Val	Arg	Val	Glu	Ile	Leu	Arg	Asn	Phe	Tyr	Phe	Ile	Asn	Arg	Leu
Thr	Gly	Tyr	Leu	Arg	Asn										

<210> 1302  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

Met	Ser	Tyr	Asn	Leu	Leu	Gly	Phe	Leu	Gln	Arg	Ser	Ser	Asn	Phe	Gln
1				5					10					15	
Cys	Gln	Lys	Leu	Leu	Trp	Gln	Leu	Asn	Gly	Arg	Leu	Glu	Tyr	Cys	Leu
Lys	Asp	Arg	Met	Asn	Phe	Asp	Ile	Pro	Glu	Glu	Ile	Lys	Gln	Leu	Gln
Gln	Phe	Gln	Lys	Glu	Asp	Ala	Ala	Leu	Thr	Ile	Tyr	Glu	Met	Leu	Gln
Asn	Ile	Phe	Ala	Ile	Phe	Arg	Gln	Asp	Ser	Ser	Ser	Thr	Gly	Trp	Asn
65															
Glu	Thr	Ile	Val	Glu	Asn	Leu	Leu	Ala	Asn	Cys	Tyr	His	Gln	Ile	Asn
His	Leu	Lys	Thr	Val	Leu	Glu	Glu	Lys	Leu	Glu	Lys	Glu	Asp	Phe	Thr
Arg	Gly	Lys	Leu	Met	Ser	Ser	Leu	His	Leu	Lys	Arg	Tyr	Tyr	Gly	Arg
Ile	Leu	His	Tyr	Leu	Lys	Ala	Lys	Glu	Tyr	Ser	His	Cys	Ala	Trp	Thr

Ile Val Arg Val Glu 145 Leu Arg Asn Phe Tyr Phe Ile Asn 155 Leu 160  
 Thr Gly Tyr Leu Arg Asn 165

<210> 1303  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

<400> 1303  
 Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg Thr Leu Met  
 1 5 10 15  
 Leu Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys Leu Lys Asp  
 20 25 30  
 Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn Gln Phe Gln  
 35 40 45  
 Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln Gln Ile Phe  
 50 55 60  
 Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp Glu Thr Leu  
 65 70 75 80  
 Leu Asp Lys Phe Tyr Thr Glu Leu His Gln Gln Leu Asn Asp Leu Glu  
 85 90 95  
 Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro Leu Met Lys  
 100 105 110  
 Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg Ile Thr Leu  
 115 120 125  
 Tyr Leu Lys Glu Lys Lys Tyr Ser Pro Cys Ala Trp Glu Val Val Arg  
 130 135 140  
 Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu Gln Glu Ser  
 145 150 155 160  
 Leu Arg Ser Lys Glu 165

<210> 1304  
 <211> 46  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> primer reverse IFNA-E159H

<400> 1304  
 aaggatcctc attccttact tcttaaactg tgttgcaagt ttgttg 46

<210> 1305  
 <211> 46  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> primer reverse IFNA-E159Q

<400> 1305  
 aaggatcctc attccttact tcttaaactc tgttgcaagt ttgttg 46

<210> 1306  
 <211> 41  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> primer reverse IFNA-E159Q

<400> 1306

aacatattgtg tgatctgcct aaaccaca gcctgggtag c

41